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CONTAMINATION ASSESSMENT PLAN FOR GROUNDWATER MONITORING AND FREE
PRODUCT EVALUATION AT THE FORMER BULK TANK FACILITY NS MAYPORT FL
7/1/2010
TETRA TECH NUS

Comprehensive **L**ong-term **E**nvironmental **A**ction **N**avy

CONTRACT NUMBER N62467-04-D-0055



Contamination Assessment Plan for Groundwater Monitoring and Free Product Evaluation at the Former Bulk Tank Facility

**Naval Station Mayport
Jacksonville, Florida**

Contract Task Order 0031

July 2010



Southeast

NAS Jacksonville

Jacksonville, Florida 32212-0030



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Reference: CLEAN IV Contract Number N62467-04-D-0055
Contract Task Order Number 0031

Subject: Final Contamination Assessment Plan for Groundwater Monitoring and Free Product
Evaluation at the Former Bulk Tank Facilities
Naval Station Mayport, Jacksonville, Florida

Dear Ms. Washington:

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit the final Contamination Assessment Plan (CAP) for Groundwater Monitoring and Free Product Evaluation at the Former Bulk Tank Facilities at Naval Station (NAVSTA) Mayport, Jacksonville, Florida. This CAP was prepared for the United States Navy, Naval Facilities Engineering Command, Southeast (NAVFAC SE) under the Comprehensive Long-term Environmental Action Navy (CLEAN) IV Contract Number N62467-04-D-0055 for Contract Task Order (CTO) 0031.

If you have any questions with regard to this submittal, please contact me via e-mail at Mark.Peterson@tetrattech.com or by phone at (904) 730-4669, Extension 213.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark A. Peterson'.

Mark A. Peterson, P.G.
Task Order Manager

MAP/lc

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Administrative Record
CTO 0118 Project File

**CONTAMINATION ASSESSMENT PLAN
FOR
GROUNDWATER MONITORING AND
FREE PRODUCT EVALUATION
AT THE
FORMER BULK TANK FACILITY**

**NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA**

**COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT**

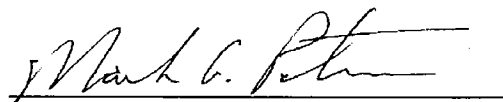
**Submitted to:
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**CONTRACT NUMBER N62467-04-D-0055
CONTRACT TASK ORDER 0031**

JULY 2010

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ACRONYMS

| | |
|--------------------------------|---|
| ABB-ES | ABB Environmental Services, Inc. |
| Aerostar | Aerostar Environmental Services, Inc. |
| AST | Aboveground Storage Tank |
| bls | Below Land Surface |
| Bhate | Bhate Environmental Associates, Inc. |
| BTEX | Benzene, Toluene, Ethylbenzene, and Xylenes |
| °C | Degree Celsius |
| CAP | Contamination Assessment Plan |
| CAR | Contamination Assessment Report |
| CLEAN | Comprehensive Long-term Environmental Action Navy |
| CTO | Contract Task Order |
| DDT | Dichlorodiphenyltrichloroethane |
| DPT | Direct Push Technology |
| E. C. Jordan | E. C. Jordan and Company Engineers and Scientists |
| ENCO | Environmental Conservation Laboratories, Inc. |
| ESA | Environmental Science Associates, Inc. |
| ESE | Environmental Science and Engineering, Inc. |
| ESI | Expanded Site Investigation |
| FAC | Florida Administrative Code |
| FBTF | Former Bulk Tank Facilities |
| FDEP | Florida Department of Environmental Protection |
| FISC | Fleet and Industrial Supply Center |
| FL-PRO | Florida Petroleum Range Organics |
| FOL | Field Operations Leader |
| GAG | Gasoline Analytical Group |
| GCTL | Groundwater Cleanup Target Level |
| H ₂ SO ₄ | Sulfuric Acid |
| HCl | Hydrochloric Acid |
| IDW | Investigation Derived Waste |
| KAG | Kerosene Analytical Group |
| L | Liter |
| µg/kg | Microgram per kilogram |
| MDL | Method Detection Limit |
| MILCON | Military Construction |
| mL | Milliliter |

ACRONYMS (Continued)

| | |
|-----------|--|
| MTBE | Methyl Tertiary Butyl Ether |
| NAVFAC SE | Naval Facilities Engineering Command Southeast |
| NAVSTA | Naval Station |
| Navy | United States Navy |
| NFA | No Further Action |
| NIRP | Navy Installation Restoration Program |
| NTU | Nephelometric Turbidity Unit |
| ORS | Oil Recovery System |
| OWTP | Oily Waste Treatment Plant |
| PAH | Polynuclear Aromatic Hydrocarbon |
| PCB | Polychlorinated Biphenyl |
| QC | Quality Control |
| RBCA | Risk-Based Corrective Action |
| RCRA | Resource Conservation and Recovery Act |
| RFA | RCRA Facility Assessment |
| RFA SV | RCRA Facility Assessment Sampling Visit |
| RFI | RCRA Facility Investigation |
| RMO | Risk Management Option |
| SCTL | Soil Cleanup Target Level |
| SWMU | Solid Waste Management Unit |
| SOP | Standard Operating Procedure |
| SVOC | Semivolatile Organic Compound |
| Team | NAVSTAL Mayport Tier I Environmental Partnering Team |
| TOM | Task Order Manager |
| TRPH | Total Recoverable Petroleum Hydrocarbons |
| TtNUS | Tetra Tech NUS, Inc. |
| USEPA | United States Environmental Protection Agency |
| VOC | Volatile Organic Compound |

1.0 INTRODUCTION

Tetra Tech NUS, Inc. (TtNUS) has prepared this Contamination Assessment Plan (CAP) for the Former Bulk Tank Facilities (FBTF) 99, 100, 101, 102, 201, 202, 203, and 204 at Naval Station (NAVSTA) Mayport, Jacksonville, Florida. This CAP was prepared for the United States Navy, Naval Facilities Engineering Command Southeast (NAVFAC SE) under Contract Task Order (CTO) 0031, for the Comprehensive Long-term Environmental Action Navy (CLEAN) IV Contract Number N62467-04-D-0055.

The CAP provides the rationale and methodology for performing field activities to characterize groundwater conditions at the referenced sites. The objective of the proposed field investigations is to determine the extent of groundwater impacts by previous operations at the sites. The data collected during the FBTF investigations will be used to prepare corrective action documents, if required, in accordance with Chapter 62-780, Florida Administrative Code (F.A.C.). The investigation will characterize site conditions from which to base future courses of action.

Multiple environmental investigations have been conducted at and near the FBTF since 1989. The CAP presents a review of the historical environmental investigation at the FBTF and surrounding environmental restoration sites located in the immediate area of the FBTF. The CAP was written to gather all pertinent environmental investigation results, report the results of data collected to determine current site conditions, and to establish a path forward for future investigations and corrective measure for the sites. The purpose and scope of the CAP was discussed and generally agreed on by the NAVSTA Mayport Tier I Environmental Partnering Team (Team) during the May 2007, May 2008, and May 2009 Team meetings (Team, 2007, 2008, and 2009).

All areas of previously identified soil contamination are now located beneath the secondary containment of the new aboveground storage tanks (ASTs) that were installed after the removal of the former AST systems. The majority of contaminated soils are believed to have been removed during the construction of the new ASTs; however, no documentation of the soil removal and disposal could be located during the preparation of this CAP. Additional soil sampling at these locations was not possible due to presence of the secondary containment for the new AST systems. Groundwater samples were collected from the existing monitoring wells located at the FBTF to determine the current condition of the groundwater at the site. The groundwater samples were submitted for benzene, toluene, ethylbenzene, and xylenes (BTEX); methyl tertiary butyl ether (MTBE); polynuclear aromatic hydrocarbons (PAHs); and total recoverable petroleum hydrocarbons (TRPH) analysis. The results for all of the groundwater samples were less than laboratory detection limits. Three temporary monitoring wells were installed in areas where free product on the groundwater was previously identified. No free product has been observed in the temporary monitoring wells.

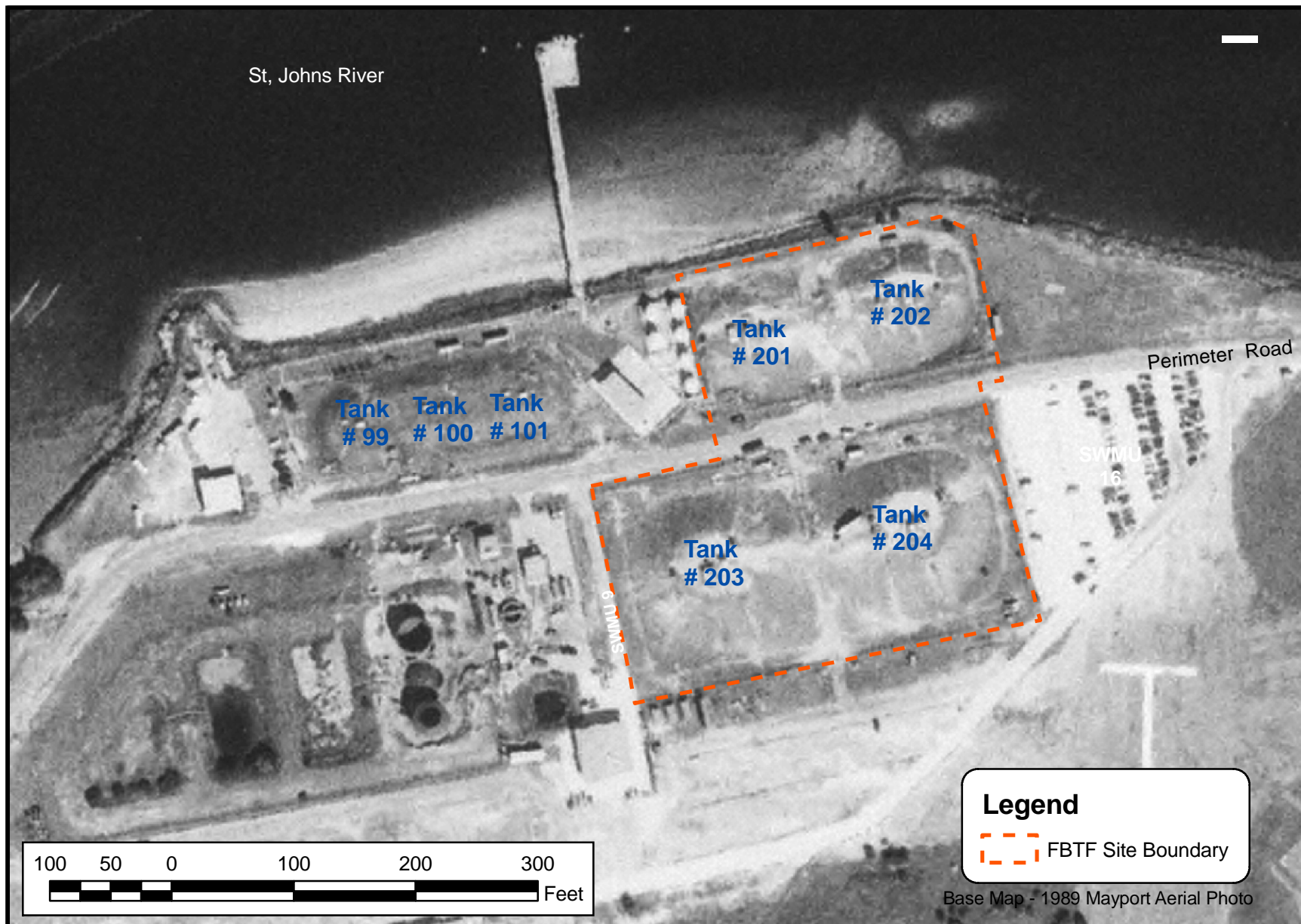
The anticipated path forward for the FBTF sites consists of one year of quarterly groundwater monitoring. Based on the one year of groundwater monitoring, the site will be evaluated against the Contaminated Site Risk-Based Corrective Action (RBCA) criteria established in Chapter 62-780, F.A.C., to determine if the sites qualify for No Further Action (NFA) under Risk Management Option (RMO) – Level II.

2.0 SITE DESCRIPTION

NAVSTA Mayport is located within the corporate limits of the City of Jacksonville, Duval County, Florida, and is approximately 12 miles to the east northeast of downtown Jacksonville and adjacent to the town of Mayport. The Station complex is located on the northern end of a peninsula bounded by the Atlantic Ocean to the east and the St. Johns River to the north and west. NAVSTA Mayport occupies the entire northern part of the peninsula except for the town of Mayport, which is located to the west between the Station and the St. Johns River.

The FBTF are located along the northern portion of NAVSTA Mayport situated between the airfield and the southern shore of the St. Johns River. The FBTF were located on approximately 7 acres in the vicinity of the present NAVSTA Mayport Fuel Farm. The FBTF included three 210,000 gallon ASTs (Tanks 99, 100, and 101) used to store oily wastewater, one 590,000 gallon AST (Tank 201) used to store JP-5, one 598,000 gallon AST (Tank 202) used to store JP-5, and two 1,500,000 gallon ASTs (Tanks 203 and 204) used to store diesel fuel. The tanks were demolished under a 1998 Military Construction (MILCON) project (P-468) from April 2000 to August 2001. New AST systems were installed with concrete secondary containment in the location of former Tanks 201, 202, 203, and 204. Figure 2-1 shows the location of the site and the position of the tanks as they appeared in 1989 before demolition.

One Navy Installation Restoration Program (NIRP) site (Site 9) and two Resource Conservation and Recovery Act (RCRA) Solid Waste Management Units (SWMUs) (SWMUs 11 and 51) have been identified to be located on portions of the FBTF sites. One NIRP site (Site 16) and five RCRA SWMUs (SWMUs 6, 7, 9, 16, and 48) are located adjacent to the FBTF sites. Figure 2-2 shows the location of the FBTF and the surrounding environmental restoration sites.



DRAWN BY JLG DATE 12/16/08

CHECKED BY DATE

COST/SCHEDULE-AREA

SCALE
AS NOTED



**SITE LAYOUT
FORMER BULK TANK FACILITIES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA**

CONTRACT NUMBER
CTO 031

APPROVED BY DATE

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FIGURE 2-1

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| COST/SCHEDULE-AREA SCALE AS NOTED | | | |
| SITE LOCATION AND ADJACENT ENVIRONMENTAL RESTORATION SITES FORMER BULK TANK FACILITIES NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA | | | |
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3.0 SITE HISTORY

3.1 TANKS 99, 100, AND 101 (SWMU 51)

Tanks 99, 100, and 101 were installed at NAVSTA Mayport in 1954 and consisted of 210,000 gallon steel ASTs. Tanks 99 and 100 were used to receive oily wastewater from the Oily Waste Treatment Plant (OWTP). Tank 101 was used to hold the oily phase of the oily waste water that was pumped from Tanks 99 and 100. Tanks 99, 100, and 101 were identified as SWMU 51 in the 1989 RCRA Facility Assessment (RFA) and were included in the sites that were recommended for further investigation (A. T. Kearney, Inc., 1989).

Tanks 99, 100, and 101 were demolished under a 1998 MILCON project (P-468) in 1999 to 2002. In May 2000, Environmental Science Associates, Inc. (ESA) performed a limited closure assessment following the removal of the tanks. As part of the assessment activities, groundwater samples were collected from three existing monitoring wells (MW-15S, MW-03S, and MW-13S) and three temporary monitoring wells (TMW-1, TMW-2, and TMW-3) installed during the assessment. Three soil samples (CS-1, CS-2, and CS-3) were collected from soil borings installed at the site during the assessment. Soil and groundwater samples were submitted to a fixed-base laboratory for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), TRPH, and metals analysis (ESA, 2000a).

The groundwater sample collected from existing monitoring well MW-15S exceeded Florida Department of Environmental Management (FDEP) Groundwater Cleanup Target Levels (GCTLs) for naphthalene, 1-methylnaphthalene, 2-methylnaphthaene, and TRPH. The groundwater sample collected from temporary monitoring well TMW-2 exceeded FDEP GCTLs for naphthalene, 1-methylnaphthalene, and 2-methylnaphthaene. The groundwater sample collected from temporary well TMW-1 exceeded FDEP GCTLs for lead. None of the soil samples had exceedances of FDEP Soil Cleanup Target Levels (SCTLs) (ESA, 2000a).

Tanks 99, 100, and 101 were identified as SWMU 51 in the 1989 RFA Report (A. T. Kearney, Inc., 1989) and were identified as requiring additional investigation. SWMU 51 was classified as a Group II SWMU. When field investigations were conducted at other Group II SWMUs between 1993 and 1994, no field investigations were conducted at SWMU 51. Currently, the area at and around SWMU 51 is used for parking. The temporary and permanent monitoring wells sampled during the limited tank closure assessment are no longer present at SWMU 51. It is believed the wells were destroyed when the parking area was put into place. No environmental samples have been collected at SWMU 51 since the limited tank closure assessment in 2000. A RCRA Facility Investigation (RFI) is currently being conducted for SWMU 51.

3.2 TANKS 201, 202, 203, AND 204

Tanks 201 and 202 were installed at NAVSTA Mayport in 1960 and consisted of one 590,000 gallon AST (Tank 201) used to store JP-5 and one 598,000 gallon AST (Tank 202) used to store JP-5. Tanks 203 and 204 were installed at NAVSTA Mayport in 1960 and consisted of 1,500,000 gallon ASTs used to store diesel fuel.

In October 1996, petroleum free product was discovered in monitoring well MPT-16-MW02S during the RFI for SWMU 16. Monitoring well MPT-16-MW02S was located approximately 90 feet east of Tank 202, and the FBTF were believed to be the source of the free product. In May 1997, Bhate Environmental Associates, Inc. (Bhate) conducted a contamination assessment within the fenced area of Tanks 201, 202, 203, and 204. The area around monitoring well MPT-16-MW02S was also included in the contamination assessment.

The contamination assessment consisted of a soil gas survey, soil sample collection, and groundwater sample collection. The soil gas survey used 75 samplers deployed across the Fuel Farm area upgradient from monitoring well MPT-16-MW02S. The soil gas samplers detected organic constituents at various locations across the site, and suggested that Tank 202 was the likely source of the petroleum release. Soil and groundwater sample locations were based, in part, on the results of the soil gas survey. Thirty-two soil borings were installed utilizing direct push technology (DPT), four shallow [14 to 19 feet below land surface (bls)] soil borings were installed utilizing a hollow-stem auger drill rig, and one deep soil boring (25 feet bls) was installed utilizing a hollow-stem auger drill rig. Two soil samples were collected from each soil boring with the deep of the sample being based on field observations and screenings with an organic vapor analyzer.

The soil samples were submitted to a fixed-base laboratory for TRPH analysis. Four of the soil samples had concentrations that were greater than the current FDEP SCTL for leachability to groundwater. These samples were located in the vicinity of Tank 202; all other sample concentrations were either less than the FDEP SCTL for leachability to groundwater or less than the analytical Method Detection Limit (MDL). During the contamination assessment, groundwater samples were collected from nine newly installed monitoring wells (FF-MW-1 through FF-MW-9) and four existing monitoring wells. 1-Methylnaphthalene and 2-methylnaphthalene were detected in one monitoring well (FF-MW-5) at concentrations greater than FDEP GCTLs. BTEX and PAH constituents were either less than FDEP GCTLs or less than the analytical MDL. Monitoring well FF-MW-5 was located adjacent to Tank 202. Monitoring well MPT-16-MW02S contained 1/32 inch of free product. The soil gas survey identified two areas (to the immediate north and south of Tank 202) of former spills or petroleum contamination. No soil or groundwater exceedances were observed in samples collected under this assessment. Bhate submitted

a Contamination Assessment Report (CAR) in November 1997 that recommended site wide groundwater monitoring (Bhate, 1997).

In June 1998, Bhate conducted additional soil and groundwater investigations in the vicinity of Tank 202 based on the results from the CAR. The investigation consisted of the collection of soil samples at three locations adjacent to Tank 202, the installation of two additional monitoring wells (FF-MW-10 and FF-MW-11), and the collection of groundwater samples. The soil samples were submitted to a fixed-base laboratory for BTEX, PAH, and TRPH analysis. TRPH was detected at concentrations greater than FDEP SCTLs at two soil sample locations. All other constituents were either not detected or were detected at concentrations greater than FDEP SCTLs. Groundwater samples were collected from the two newly installed monitoring wells and submitted to a fixed-base laboratory for BTEX, PAH, TRPH, and total lead analysis. Naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, and TRPH were detected at concentrations greater than the current FDEP GCTLs in monitoring well FF-MW-10. No constituents were detected at concentrations greater than the current FDEP GCTLs in monitoring well FF-MW-11. The results of the additional investigation were submitted in a CAR Addendum dated October 1998 (Bhate, 1998).

In July 1999, Bhate conducted groundwater monitoring based on the results from the additional soil and groundwater investigations conducted in June 1998. The investigation consisted of the collection of groundwater samples from seven of the existing monitoring wells for TRPH and PAH analysis. 1-Methylnaphthalene and 2-methylnaphthalene were detected at concentrations greater than the current FDEP GCTLs in monitoring well MPT-16-MW02S (Bhate, 1999).

The four ASTs were demolished under a 1998 MILCON project (P-468) conducted from 1999 through 2002. The tanks were replaced with new ASTs that were built with concrete secondary containment.

A Limited Tank Closure Report for Tank 201 was prepared by Aerostar Environmental Services, Inc. (Aerostar) in January 2001. The closure assessment consisted of the collection of 5 soil samples from the base of the tank, 8 soil samples from the perimeter of the tank, and 13 groundwater samples collected at each of the soil sample locations. The assessment identified one soil sample location where TRPH was identified at a concentration greater than the FDEP SCTL. Groundwater samples at two locations around the perimeter of the tank showed 1-methylnaphthalene and 2-methylnaphthalene at concentrations greater than FDEP GCTLs. Benzo(a)anthracene was detected at concentrations greater than FDEP GCTLs at two ground water sample locations around the perimeter of the tank, and acenaphthalene and chrysene were detected at concentrations greater than FDEP GCTLs at one groundwater sample location (Aerostar, 2001a). A copy of the Closure Assessment Report is included in Appendix A.

A Limited Tank Closure Report for Tank 202 was prepared by Aerostar in March 2001. The closure assessment consisted of the collection of 5 soil samples from the base of the tank, 8 soil samples from the perimeter of the tank, and 13 groundwater samples collected at each of the soil sample locations. The assessment identified nine soil sample locations where TRPH was identified at concentrations greater than FDEP SCTLs. Naphthalene was detected at concentrations greater than FDEP GCTLs at 3 groundwater sample locations, 1-methylnaphthalene was detected at concentrations greater than FDEP GCTLs at 11 groundwater sample locations, and 2-methylnaphthalene was detected at concentrations greater than FDEP GCTLs at 8 groundwater sample locations (Aerostar, 2001b). A copy of the Closure Assessment Report is included in Appendix A.

A Limited Closure Summary Report for Tank 203 was prepared by ESA in August 2000. The closure assessment consisted of the collection of 5 soil samples from the base of the tank, 8 soil samples from the perimeter of the tank, and 13 groundwater samples collected at each of the soil sample locations. The assessment identified one soil sample location where benzo(a)anthracene and one soil sample location where benzo(a)pyrene were detected at concentrations greater than FDEP SCTLs. No constituents were detected at concentrations greater than FDEP GCTLs in the groundwater (ESA, 2000b). A copy of the Closure Assessment Report is included in Appendix A.

A Limited Tank Closure Report for Tank 204 was prepared by Aerostar in October 2001. The closure assessment consisted of the collection of 5 soil samples from the base of the tank, 8 soil samples from the perimeter of the tank, and 13 groundwater samples collected at each of the soil sample locations. The assessment identified one soil sample location where TRPH was identified at a concentration greater than the FDEP SCTL. Benzo(a)anthracene was detected in the groundwater at concentrations greater than FDEP GCTLs at three locations, and chloromethane was detected in the groundwater at a concentration greater than FDEP GCTL at one location (Aerostar, 2001c). A copy of the Closure Assessment Report is included in Appendix A.

3.3 NIRP SITE 9 FUEL SPILL AREA (SWMU 11)

NIRP Site 9 was located in the Fuel Farm area to the north and west of Tank 201 and consisted of soil contamination identified from a stained soil discovered in a soil boring installed for a construction plan. The source of the contamination is unknown, but is suspected to be from fuel that was spilled or leaked from the Fuel Farm and was believed to be JP-4, JP-5, or diesel fuel-marine. Site 9 was identified in the Initial Assessment Study conducted in 1986 by Environmental Science and Engineering, Inc. (ESE) for the Navy Assessment and Control of Installation Pollutants Program (ESE, 1986). An Expanded Site Investigation (ESI) was conducted at Site 9 in 1988 by E. C. Jordan and Company Engineers and Scientists (E. C. Jordan). Three subsurface soil samples were collected and submitted to a laboratory for analysis of VOCs, SVOCs, and total metals. Methylene chloride was detected in one soil sample at a

concentration of 186 micrograms per kilogram ($\mu\text{g}/\text{kg}$). This concentration is less than the current FDEP SCTL for residential direct exposure, but does exceed the SCTL for leachability to groundwater. No other constituents were detected in the soil samples. During the ESI at Site 9, three monitoring wells were installed at the site, and groundwater samples were collected and analyzed for VOCs, SVOCs, pesticides, and total metals. Naphthalene and aldrin were detected at concentrations that exceeded the FDEP GCTL, and all other constituents were less than GCTLs (E. C. Jordan, 1988).

Site 9 was identified as SWMU 11 in the 1989 RFA and was included in the sites that were recommended for an RFI (A. T. Kearney, Inc., 1989). SWMU 11 was included in the Group II SWMU sites, and an RFI was conducted for the Group II SWMUs in 1993 and 1994. During the RFI field activities, soil and groundwater screening samples and groundwater samples were collected at the site. Two soil screening borings (MPT-8-T19 and MPT-8-T21) were install at the site using DPT, and soil samples were collected at depths of 8 to 10 feet bls and 12 to 14 feet bls in boring MPT-8-T19, and 12 to 14 feet bls in boring MPT-8-T21. The soil screening samples were submitted for TRPH analysis, and TRPH was detected in all three soil samples at concentrations that ranged from 1,163 to 18,459 milligrams per kilogram. All three of the soil screening samples exceeded the current FDEP SCTL for leachability to groundwater. Groundwater samples were collected from each of the borings and submitted for TRPH analysis. TRPH was detected in each of the groundwater screening samples at concentrations of 2 and 4.2 micrograms per liter. Based on the results of the soil and groundwater screening, one monitoring well (MPT-8-MW12S) was installed. Groundwater samples were collected from the monitoring well and analyzed for VOCs, SVOCs, and metals. The analytical results of the groundwater samples for the VOCs and SVOCs constituents did not exceed the current FDEP GCTLs. Additional sampling is being conducted at SWMU 11, and an RFI Addendum will be prepared for the site.

3.4 NIRP SITE 16 TRANSFORMER STORAGE YARD (SWMU 16)

NIRP Site 8 was located east of Tank 204 on an abandoned runway. The site has been used since 1981 to store out of service transformers. It is not known if transformers containing polychlorinated biphenyls (PCBs) have been stored at the site. Minor spills and leaks have been reported to have occurred at the site. During an ESI conducted at the site in 1988, two surface soil samples were collected and analyzed for VOCs, SVOCs, PCBs, pesticides, and total metals. Dichlorodiphenyltrichloroethane (DDT) and dichlorodiphenyldichloroethylene were detected at concentrations greater than the current FDEP SCTLs for residential exposure and leachability to groundwater in one of the samples (MPT-16-SS1), and DDT and dichlorodiphenyldichloroethane were detected at concentrations greater than the current FDEP SCTLs for residential exposure and leachability to groundwater in one of the samples (MPT-16-SS2). All other constituents were either not detected or detected at concentrations less than SCTLs. No groundwater samples were collected at Site 16 during the ESI.

Site 16 was identified as SWMU 16 in the 1989 RFA and was included in the sites that were recommended for an RFI. SWMU 16 was included in the Group II SWMU sites, and an RFI was conducted for the Group II SWMUs in 1993 and 1994. During the RFI field activities surface soil, subsurface soil, and groundwater were collected at the site. ABB Environmental Services, Inc. (ABB-ES) conducted RFI field activities during two events in 1993 and 1994 at SWMU 16. In 1993, three groundwater monitoring wells were installed, and 37 surface soil samples, 6 subsurface soil samples, and 3 groundwater samples were collected and analyzed. In 1994, an additional groundwater monitoring well was installed, and groundwater samples were collected from the existing and newly installed monitoring wells for analysis (ABB-ES, 1996).

Results of the surface soil assessment did not indicate the presence of PCBs when soils were tested with field test kits; however, the PCB Aroclor-1260 was detected in all the confirmation surface soil samples at concentrations below 200 µg/kg. The PCB Aroclor-1248 was detected in one surface soil sample at a concentration of 69 µg/kg. The concentration of PCBs detected in surface soil during the RFI investigation was less than the FDEP SCTL (ABB-ES, 1996).

Results of the subsurface soil assessment performed during monitoring well installation indicated the presence of VOCs, SVOCs, pesticides, and PCBs. None of the compounds were detected at concentrations greater than their respective benchmark standards (ABB-ES, 1996). Petroleum related compounds in the subsurface soil were detected just above the water table. The petroleum related compounds were believed to have migrated laterally onto the site from the adjacent Fuel Farm and were not related to a release from SWMU 16. The detected pesticide, chlordane, was attributed to historical pesticide application. The PCB Aroclor-1260 was detected at 17 µg/kg in the subsurface soil sample collected from the 3 to 4 foot interval from the soil boring for monitoring well MPT-16-MW03S. Two inorganic analytes, beryllium and arsenic, were detected at concentrations exceeding benchmark standards; however, the two constituents were detected in an area outside the transformer storage area, and the analytes are suspected to have been from dredge material.

No chemical constituents were detected in exceedance of both background screening concentrations and FDEP GCTLs (ABB-ES, 1996).

In 1995, the surface soil and pavement (approximately 18 inches bls) at SWMU 16 were removed to prepare the area prior to paving for use as a parking lot. The excavated materials were temporarily stockpiled approximately 250 feet southwest of SWMU 16. On July 19, 1995, Navy personnel collected four composite samples of the materials excavated from SWMU 16 and analyzed the samples with a field immunoassay test kit. The composite samples results suggested that PCB concentrations were less than the human health-based residential and industrial FDEP SCTLs (ABB-ES, 1996).

Based on the results of the field investigation and excavation work conducted at SWMU 16, it was recommended in the RFI that no further investigation was necessary for SWMU 16.

On May 15, 2002, TtNUS mobilized to SWMU 16 to collect additional (confirmation) soil samples. The soil samples were collected to confirm the results of the RFI for SWMU 16. Three soil samples were collected at the approximate locations where PCBs were detected in excess of the United States Environmental Protection Agency (USEPA) Region III Risk-Based Concentrations during the RFI. The three soil borings were advanced with a stainless steel hand auger and were identified as MPT-16-SSE7, MPT-16-SSF2, and MPT-16-SSG7. The three soil samples were analyzed for Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260. The analytical results indicated that PCBs were not present in the 1-foot interval soil samples from soil borings MPT-16-SSE7, MPT-16-SSF2, and MPT-16-SSG7.

Based on the results of the soil sampling and analysis activities conducted in May 2002, PCBs are not present in surface soil at SWMU 16. As a result, TtNUS recommended the preparation of an NFA Statement of Basis for SWMU 16.

3.5 NIRP SITE 8 WASTE OIL PIT AREA (SWMU 6)

NIRP Site 8 is located southwest of the Fuel Farm area approximately 300 feet southwest of the former location of Tank 99. Site 8 consisted of an inactive waste oil pit located on the western portion of the OWTP. The site consisted of a 0.2 acre triangular shaped pit that was excavated to a depth of approximately 6 feet bls. The pit was used to from 1973 to 1978 to store waste oily bilge water that was pumped to it from ships. The pit also received waste oils and substances mixed with waste oil. The pit was not lined, and bilge water and oily waste were allowed to seep into the underlying soils. It was estimated that 250,000 gallons of bilge water and several thousand gallons of waste oil were disposed in the waste oil pit. The pit was filled and cover in 1979, and a sludge drying bed was constructed on top of the pit (A. T. Kearney, 1989).

An ESI was conducted at the site in 1988 (E. C. Jordan, 1988). During the ESI, three monitoring wells were installed at the site and groundwater samples were collected and analyzed for VOCs, SVOCs, pesticides, PCBs, and total metals. Benzene, naphthalene, bis(2-ethylhexyl)phthalate, and lead were detected at concentrations that exceeded FDEP GCTLs. All other constituents were either not detected or detected at concentrations less than GCTLs. Monitoring well MPT-8-2, which is the monitoring well located closest to the FBTF, was observed to contained free phase petroleum product.

Site 8 was identified as SWMU 6 in the 1989 RFA and was included in the sites that were recommended for an RFI. SWMU 6 was included in the Group II SWMU sites, and an RFI was conducted for the

Group II SWMUs in 1993 and 1994. During the RFI field activities, sludge, subsurface soil, and groundwater samples were collected at SWMU 6. Five sludge samples and two subsurface soil samples were collected at SWMU 6. The analytical results of the sludge and soil samples indicated that soils and at SWMU 6 had been impacted by VOC and SVOC constituents. Groundwater samples were collected during the RFI from four monitoring wells located on or adjacent to SWMU 6 (MPT-8-MW01S, MPT-8-MW02S, MPT-8-MW03S, and MPT-8-MW06S). Free product was present in monitoring wells MPT-8-MW02S and MPT-8-MW03S during the RFI. These wells are located down-gradient from SWMU 6 and to the southwest of Tanks 99, 100, and 101.

3.6 OILY WASTE TREATMENT PLANT (SWMU 9)

The OWTP was identified as SWMU 9 in the 1989 RFA and was included in the sites that were recommended for an RFI (A. T. Kearney, 1989). SWMU 9 is located south of the Fuel Farm area approximately 150 feet south of the former location of Tanks 100 and 101. The OWTP was constructed around 1979 and used to treat bilge water from ships and other oily waste generated at NAVSTA Mayport. At the time of the RFA, SWMU 9 included a rapid mix/flocculation tank, a clarifier, a neutralization tank, and connected piping. The OWTP was updated in 1989 and currently consists of a dissolved air floatation unit and three holding tanks.

SWMU 9 was included in the Group II SWMU sites, and a RFI was conducted for the Group II SWMUs in 1993 and 1994. During the RFI field activities, groundwater samples were collected at SWMU 9. Two soil screening locations were located at SWMU 9 during the RFI. No petroleum constituents were detected at SWMU 9 during the soil screening. Groundwater samples were collected during the RFI from monitoring well MPT-8-MW09S. Three SVOC constituents were detected at concentrations greater than current FDEP GCTLs (2-methylphenol; 2,4-dimethylphenol; and 3- & 4-methylphenol). SWMU 9 is located upgradient of Tanks 99, 100, and 101. Additional sampling is being conducted at the SWMU 9, and an RFI Addendum will be prepared for the site.

3.7 OWTP SLUDGE DRYING BEDS (SWMU 7)

The OWTP sludge drying beds were identified as SWMU 7 in the 1989 RFA and were included in the sites that were recommended for an RFI. SWMU 7 consists of three sludge drying beds that were used to dewater sludge from the OWTP and is located approximately 150 feet north of the former location of Tank 99. Each drying bed is approximately 150 feet in length, 50 feet wide, and consisted of unlined beds with earthen berms that were approximately 15 feet above land surface. The sludge placed in these beds was from the clarifier of the OWTP and from sludge that settled to the bottom of Tanks 99 and 100.

SWMU 7 was included in the Group II SWMU sites, and an RFI was conducted for the Group II SWMUs in 1993 and 1994. During the RFI field activities, sludge, subsurface soil, and groundwater samples were collected at SWMU 7. Thirteen sludge samples and two subsurface soil samples were collected at SWMU 7. The analytical results of the sludge and soil samples indicated that soils and at SWMU 7 had been impacted by VOC and SVOC constituents. Groundwater samples were collected during the RFI from 7 monitoring wells located adjacent to SWMU 7 and 11 monitoring wells located down gradient from SWMUs 6 and 7. The 11 down gradient monitoring wells were located around the perimeter of the former locations of Tanks 99, 100, and 101. Free product was present in monitoring wells MPT-8-MW02S, MPT-8-MW03S, and MPT-8-MW07S during the RFI. These wells are located down gradient from SWMU 6 and south and southwest of Tanks 99, 100, and 101.

3.8 FORMER CHEMISTRY LAB ACCUMULATION AREA (SWMU 48)

The former chemistry lab accumulation area was identified as SWMU 48 in the 1989 RFA and was included in the sites that were recommended for further investigation. SWMU 48 was located in a grass field behind (west and north) the chemistry lab at the OWTP and consisted of poorly maintained 55-gallon drums and smaller plastic containers that were reported to contained mercury and plating waste generated at the OWTP chemistry lab.

Between June and August 1998, soil and groundwater samples were collected at SWMU 48 by ABB-ES. The sampling was conducted as part of a RFA Sampling Visit (RFA SV) (confirmatory sampling) for the Group I and II SWMUs (ABB-ES, 1995). During the RFA SV, five surface soil samples, two subsurface soil samples, and four groundwater samples were collected at SWMU 48 and analyzed for VOCs, SVOCs, pesticides, PCBs, and metals. One subsurface soil sample contained arsenic at a concentration greater than the current FDEP SCTL. All other constituents in the soil samples were either less than SCTLs or not detected in the sample. Benzene, 2-methylnaphthalene, naphthalene, and lead were detected at concentrations greater than current FDEP GCTLs in monitoring well MPT-8-MW07S. 2-Methylphenol; 2,4-dimethylphenol; 3- & 4-methylphenol; iron; manganese; and sodium were detected at concentrations greater than current FDEP GCTLs in monitoring well MPT-8-MW09S. Sodium was detected at concentrations greater than current FDEP GCTLs in monitoring well MPT-8-MW08S. All other constituents in the groundwater samples were either less than GCTLs or not detected in the sample. Free product was observed in monitoring well MPT-8-MW07S in 1994. Monitoring well MPT-8-MW07S was located hydraulically upgradient from SWMU 48, and the free product and VOC and SVOC constituents detected in the well during the RFA SV are not believed to be attributable to SWMU 48. An NFA letter was issued for the site by the USEPA in 1996.

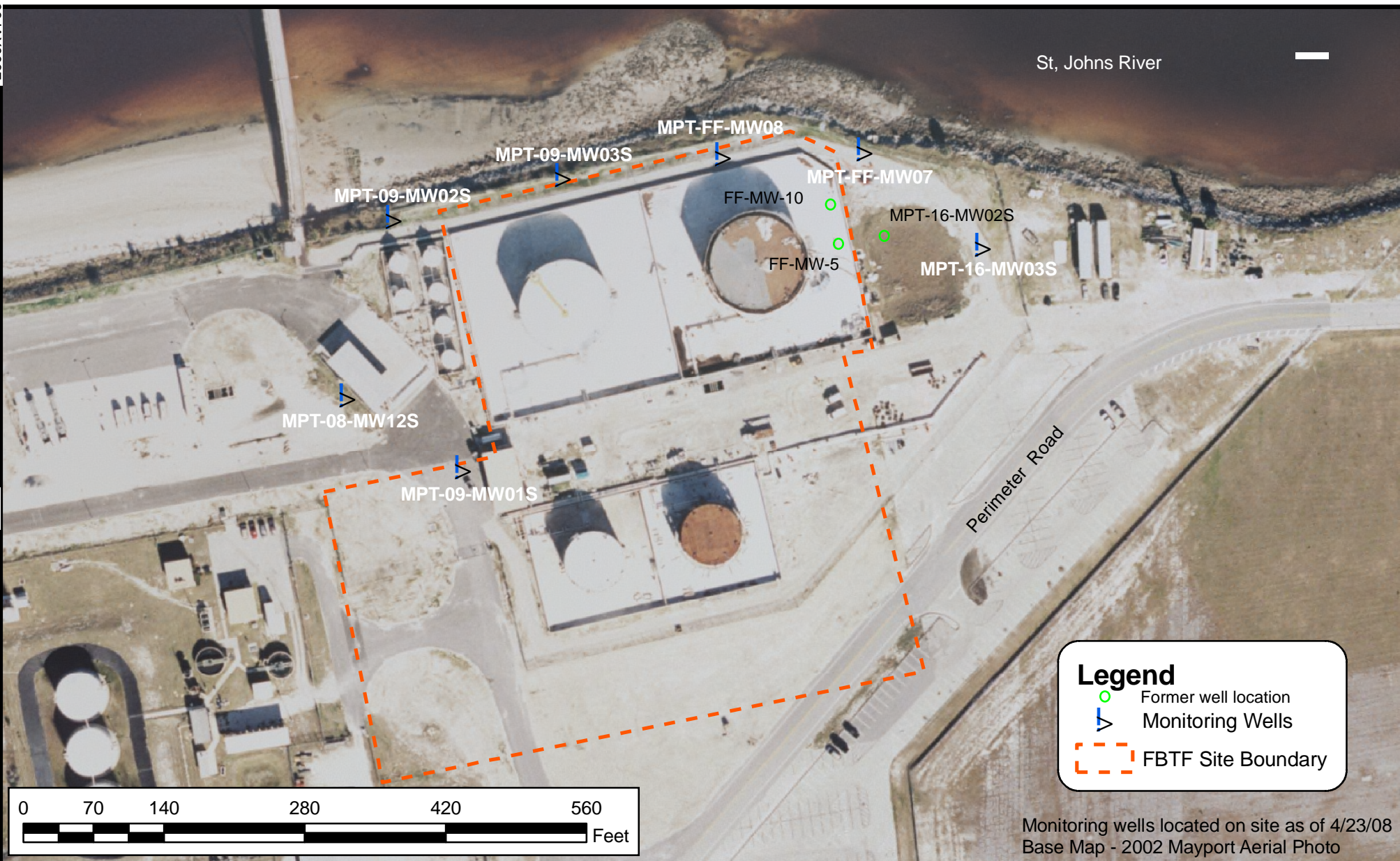
3.9 CURRENT SITE SOIL AND GROUNDWATER CONDITIONS AT THE FBTF

Soil contamination identified at the FBTF during the investigations associated with Tanks 201, 202, 203, and 204 is believed to have been removed during the construction of the new ASTs installed at the site. No documentation is available to support the excavation and disposal of the contaminated soil. The soil sample locations that contained constituents at concentrations greater than FDEP SCTLs have been covered by the secondary containment of the newly installed ASTs.

In May 2008, TtNUS conducted a survey of existing monitoring wells located at the FBTF. The majority of the monitoring wells installed during the investigations at SWMU 16 and the Bhatte contamination assessment are no longer present at the site and were most likely removed or destroyed during the installation of the new ASTs. The monitoring wells that were located at the site at the time of the well survey are shown on Figure 3-1.

On April 23 and 24, 2008, TtNUS personnel collected groundwater samples from seven monitoring wells located in the vicinity of the FBTF. Groundwater samples were collected from monitoring wells MPT-08-MW12S-0408, MPT-09-MW01S-0408, MPT-FF-MW07-0408, MPT-16-MW03S-0408, MPT-FF-MW08-0408, MPT-09-MW02S-0408, and MPT-09-MW03S-0408. Groundwater sampling was conducted in general accordance with FDEP Standard Operating Procedures (SOPs) (DEP-SOP-001/01) adopted in 2004. After collection, samples were immediately placed on ice and delivered to Environmental Conservation Laboratories, Inc. (ENCO) in Jacksonville, Florida for analysis of BTEX and MTBE using USEPA Method 8260B, 16 method listed PAHs plus 1- and 2-methylnaphthalene using USEPA Method 8270, and TRPH using the Florida Petroleum Range Organics (FL-PRO) Method. Field data sheets are provided in Appendix B, and the groundwater analytical report is included as Appendix C. Groundwater analyzed from the monitoring wells had no petroleum impacts greater than the FDEP GCTLs for all constituents (BTEX, MTBE, PAHs, and TRPH). Free product was not observed in any of the monitoring wells during the groundwater sampling event.

On October 31, 2008, TtNUS personnel installed three temporary monitoring wells (MPT-FF-TMW01, MPT-FF-TMW02, and MPT-FF-TMW03) in the vicinity of the former location of monitoring well MPT-16-MW02S (see Figure 3-2). The temporary monitoring wells were installed to depths of 18 feet using DPT techniques. The wells were constructed of 2-inch inside diameter, Schedule 40, flush-joint polyvinyl chloride risers and flush-joint 0.010-inch factory-slotted well screens. The well screens were 10 feet in length and positioned to intersect the water table. Following well installation and development, measurements were taken from each monitoring well using an Oil Recovery System (ORS) free product probe that electronically sounds differently for free product and water. Free product was not present in any of the three newly installed monitoring wells.



Legend

- Former well location
- ▶ Monitoring Wells
- - - FBTF Site Boundary

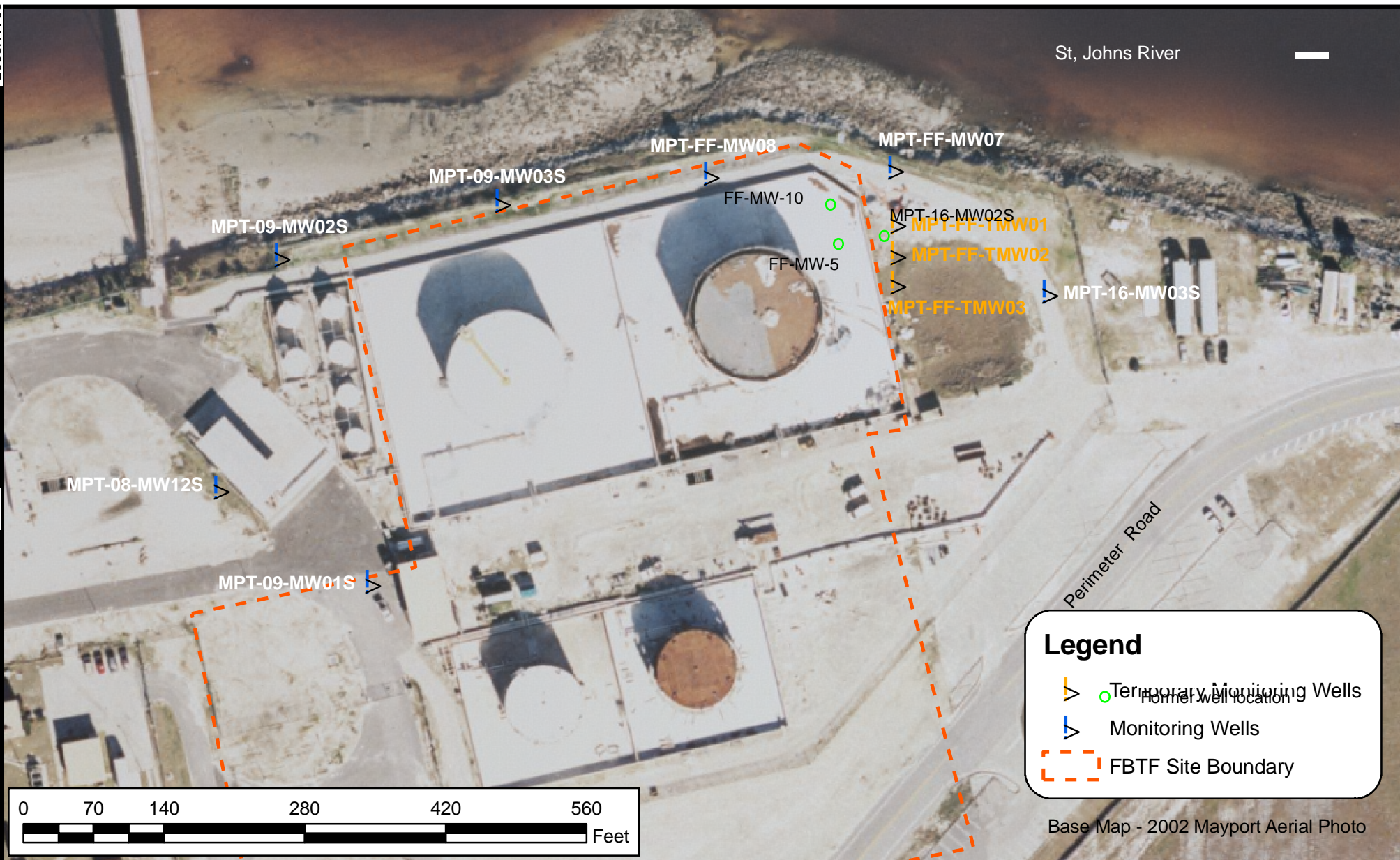
Monitoring wells located on site as of 4/23/08
Base Map - 2002 Mayport Aerial Photo

| | |
|--------------------|----------|
| DRAWN BY | DATE |
| JLG | 12/16/08 |
| CHECKED BY | DATE |
| | |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |



FBTF MONITORING WELL LOCATIONS NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA

| | |
|----------------------------|------|
| CONTRACT NUMBER CTO 031 | |
| APPROVED BY | DATE |
| — | — |
| APPROVED BY | DATE |
| — | — |
| DRAWING NO. | REV |
| FIGURE 3-1 | 0 |



| | |
|--------------------|----------|
| DRAWN BY | DATE |
| JLG | 12/16/08 |
| CHECKED BY | DATE |
| | |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |



FBTF TEMPORARY MONITORING WELL LOCATIONS NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA

| | |
|----------------------------|------|
| CONTRACT NUMBER CTO 031 | |
| APPROVED BY | DATE |
| — | — |
| APPROVED BY | DATE |
| — | — |
| DRAWING NO. | REV |
| FIGURE 3-2 | 0 |

On November 24, 2008, TtNUS personnel returned to the site to check the three temporary monitoring wells for free product. Measurements were taken from each temporary monitoring well using an ORS free product probe. Free product was not present in any of the temporary monitoring wells.

On March 2, 2010, TtNUS personnel installed a new monitoring well between MPT-FF-MW07 and MPT-16-MW03S, as discussed in the May 2009 Team meeting (Team, 2009). The new monitoring well was given the sample identification MPT-FF-MW-6R due to its close proximity to the former monitoring well MPT-FF-MW-6. The monitoring well was installed to a depth of 15 feet bls and will be included in future groundwater sampling events.

4.0 OBJECTIVE AND SCOPE OF PROPOSED ASSESSMENT

The objective of the proposed assessment described in this work plan is as follows:

- Monitoring for the presence of free product and determine the horizontal extent of groundwater impacts (if present).
- Collect data to complete a Global RBCA evaluation in accordance with Chapter 62-780, F.A.C.

The work in the following sections will be completed in accordance with the FDEP SOPs.

4.1 MOBILIZATION

Field mobilization activities will take place on the first day of each phase of work and will include travel and on-site preparatory activities. These activities will include receiving, storage, and testing of field equipment.

4.2 FREE PRODUCT INVESTIGATION

Free product was identified in historical site investigations at the site. Free product was observed in monitoring well MPT-16-MW02S during the contamination assessments conducted by Bhate in 1997 and 1999. Monitoring well MPT-16-MW02S was either removed or destroyed during removal and installation of the ASTs at the site. Three temporary monitoring wells have been installed in the vicinity of the former location of monitoring well MPT-16-MW02S and were evaluated for the presence of free product. No free product has been observed in the three temporary monitoring wells. One of the three temporary monitoring wells will be converted into a permanent monitoring well and will be continued to be monitored for the presence of free product. The other two temporary monitoring wells will be properly abandoned. This investigation will evaluate the condition of the groundwater and determine if free product is present at the site.

4.2.1 Free Product Survey

Free product measurements will be taken quarterly from each monitoring well using an ORS free product probe. If free product is present, it will be removed through low flow purging using a peristaltic pump and containerized for disposal.

4.3 GROUNDWATER INVESTIGATION

Groundwater samples will be collected from the newly installed permanent monitoring well and the following existing monitoring wells at the site: MPT-08-MW12S, MPT-09-MW01S, MPT-09-MW02S, MPT-09-MW03S, MPT-16-MW03S, MPT-FF-MW07, and MPT-FF-MW08. Groundwater samples will be collected quarterly for one year to gather data to determine if the site is eligible NFA or NFA with Controls under RMO Level I or RMO Level II per Chapter 62-780.680, F.A.C. Following the quarterly events, analytical results will be used to determine if additional monitoring wells are required.

Historically, no release has been identified in the northeastern portion of the fuel depot; therefore, at this time, there is no reason for new groundwater sample results to have changed since the last sampling conducted in 1997 (Bhate, 1997).

4.3.1 Groundwater Flow

Depth-to-water will be measured from the top-of-casing of the monitoring wells using an electronic water level indicator. The relative water table elevation at each location will be calculated by subtracting the depth-to-water measurement from the surveyed top-of-casing elevation, and a groundwater flow direction (potentiometric) map will be generated from the water table elevation data. Depths to groundwater will be recorded on a Water Level Log Sheet (see Appendix D).

A registered surveyor will survey the monitoring well installed during the site assessment. Horizontal positioning will be measured and plotted for each permanent monitoring well in accordance with the Florida State Plane Coordinate System and the North American Datum of 1983. The top-of-casing elevation of each permanent monitoring well will be surveyed in accordance to the North American Vertical Datum of 1988 and referenced to site features (i.e., building corners, etc.).

Aquifer testing will not be necessary to determine aquifer characteristics, since extensive aquifer data for NAVSTA Mayport has been obtained and documented by the United States Geological Survey. This data will be referenced and used if appropriate.

4.3.2 Groundwater Sampling

The wells will be purged using a peristaltic pump using low flow quiescent purging techniques per FDEP SOPs. The data will be recorded on a Low Flow Purge Data Sheet (see Appendix D). Depending on the groundwater parameters, up to five well volumes may be purged. If wells are purged dry with less than three well volumes removed, the water level in the well will be allowed to recover enough to collect five field readings (pH, temperature, turbidity, dissolved oxygen, and specific conductance) prior to collecting

a water sample. If the well does not purge dry using the low flow purging technique, groundwater characteristics will be taken after each well volume of water is purged or at 2- to 10-minute intervals, depending on the flow rate.

Stabilization will be defined according to the following scenarios:

I. When purging a well that has a partially submerged well screen, a minimum of one well volume will be purged prior to collecting measurements of field parameters listed below. If the well screen is fully submerged, then a minimum of one volume of the pump, associated tubing, and flow cell will be purged prior to collecting field parameters listed below. Purging will be considered complete when three consecutive measurements of the field parameters are within the desired limits as shown below.

- Temperature ± 0.2 degree Celsius ($^{\circ}\text{C}$)
- pH ± 0.2 Standard Unit
- Specific Conductivity ± 5 percent of reading
- Dissolved oxygen is not greater than 20 percent of saturation at the field measured temperature
- Turbidity is not greater than 20 Nephelometric Turbidity Units (NTUs)

II. When purging a well and Scenario I is impossible to achieve, three consecutive measurements of the following parameters are required:

- Dissolved oxygen ± 0.2 milligram per liter or 10 percent, whichever is greater
- Temperature ± 0.2 $^{\circ}\text{C}$
- pH ± 0.2 Standard Unit
- Specific Conductivity ± 5 percent of reading
- Turbidity ± 5 NTUs or 10 percent, whichever is greater

If stabilization is not achieved, five screen volumes must be removed prior to samples being collected in the appropriate sample containers. Samples to be analyzed for volatile constituents will be collected first and immediately sealed in 40-milliliter (mL) vials so that no headspace exists. Samples will be analyzed for compounds listed in Table 4-1.

The analysis provided in Table 4-1 is based on the Gasoline Analytical Group (GAG) and Kerosene Analytical Group (KAG) analytical groups listed by the FDEP in Table B of Chapter 62-770, F.A.C. The laboratory analyses selected for the GAG and KAG group are designed to identify impacts from a fuel oil

release. The data acquired during sampling at both sites will be recorded on a Groundwater Sample Log Sheet (see Appendix D).

| Table 4-1 Laboratory Sample Summary Contamination Assessment Plan for the FBTF Naval Station Mayport Jacksonville, Florida | | | | | |
|--|--------------------------------|-----------------------|----------------------------|-----------------------|---------------|
| Analyte | Proposed Method ⁽¹⁾ | Environmental Samples | Equipment Blanks (Aqueous) | Trip Blanks (Aqueous) | Total Samples |
| GROUNDWATER | | | | | |
| VOCs | SW-846 USEPA 8260B | 8 | 1 | 1 | 10 |
| PAHs ⁽²⁾ | SW-846 USEPA 8310 | 8 | 1 | 0 | 9 |
| TRPH | FL-PRO | 8 | 1 | 0 | 9 |
| Notes: ⁽¹⁾ Method referenced reflects FDEP requirements. ⁽²⁾ Includes 1-methylnaphthalene, 2-methylnaphthalene, and 16 method-listed PAHs included in Table A of Chapter 62-770, F.A.C. | | | | | |

4.4 SAMPLE HANDLING

Sample handling includes the selection of sample containers, preservatives, allowable holding times, and the analyses requested. Sample handling procedures will be in accordance with FDEP SOP 001/01 FS1000 and FS2200. Holding times vary from 7 to 14 days. A table of analysis, methods numbers, preservative, and holding time is provided as Table 4-2. Once obtained, the samples are to be placed on ice within 15 minutes of collection and cooled to 4 °C.

4.5 SAMPLE PACKAGING, SHIPPING, AND NOMENCLATURE

Samples will be packaged and shipped in accordance with FDEP SOPs. The Field Operations Leader (FOL) will be responsible for completing the following forms when samples are collected for shipping:

- Sample labels
- Chain-of-Custody labels
- Appropriate labels applied to shipping coolers
- Chain-of-Custody forms
- Federal Express Air Bills

Table 4-2
Summary of Fixed-Base Laboratory Analytical Methods

Contamination Assessment Plan for the FBTF
Naval Station Mayport
Jacksonville, Florida

| GROUNDWATER | | | | | |
|--|--------------------------|-------------------------------------|--|--|---|
| Analysis | Analytical Method | Sample Volume ⁽¹⁾ | Bottleware | Preservation ⁽²⁾ | Holding Time ⁽³⁾ |
| VOCs Aromatic and halogenated | SW-846 8260B | 3 x 40 mL | Glass vial Teflon lined septum cap | HCl to pH < 2 Cool to 4 °C Zero headspace | 14 days to analysis |
| SVOCs Both base and neutrals | SW-846 8270C | 2 x 1 L | Amber glass Teflon lined cap | Cool to 4 °C | 7 days to extraction Analysis within 40 days |
| TRPH | FL-PRO | 2 x 1 L | Amber glass Teflon lined cap | H ₂ SO ₄ to pH < 2 Cool to 4 °C | 7 days to extraction Analysis within 40 days |
| Notes: ⁽¹⁾ – Sample volume may vary based upon the laboratory. ⁽²⁾ – HCl – Hydrochloric acid; H ₂ SO ₄ – Sulfuric acid ⁽³⁾ – Holding times are measured from the date and time of sample collection. L – Liter | | | | | |

Each sample will be assigned a unique sample identification number. The unique label system established for this sampling event is as follows:

Sample identification nomenclature is designed to help differentiate the samples, allowing a quick reference to the Navy base, sample location, medium, location, and depth when applicable. All sample identification's shall have a prefix (MPT) to designate which Navy base the samples are collected, and soil and groundwater designations will be noted by a SS or MW following the base identification. Groundwater samples will be sampled from monitoring wells with next identification noting the well sampled.

Example: MPT FF- MW01

This groundwater sample is representative of a sample collected from well MW01.

4.6 SAMPLE CUSTODY

The chain-of-custody begins with the release of the empty sample bottles from the laboratory and must be documented and maintained from that point forward. To maintain custody of the sample bottles or samples, they must be in someone's physical possession, in a locked room or vehicle, or sealed with an intact custody seal. When the possession of the bottles or samples is transferred from one person to another, it will be documented in the field logbook and on the chain-of-custody. Custody of samples must be maintained and documented at all times. FDEP SOP 001/01 FS 1000 and TtNUS SOP SA-6.3 provide a description of the chain-of-custody procedures to be followed.

The FOL will be responsible for completion of the following forms when samples are collected for shipping:

1. Sample labels
2. Chain-of-custody labels
3. Appropriate labels applied to shipping coolers
4. Chain-of-custody forms
5. Federal Express air bills

All samples are to be shipped to ENCO located at 4801 Executive Park Court in Jacksonville, Florida, (904) 297-3007.

4.7 QUALITY CONTROL SAMPLES

In addition to periodic calibration of field equipment and appropriate documentation on a field calibration sheet (see Appendix D), Quality Control (QC) samples will be collected or generated during environmental sampling activities. QC samples will be collected in accordance with the requirements established during the Plan of Action negotiations.

Trip Blanks – Trip blank(s) are required if the samples will be analyzed for VOCs. Trip blanks are prepared by the laboratory providing the VOC vials and are prepared by filling the preserved vials with analyte-free water.

Equipment/Field Blanks – Equipment/Field blanks are required for sampling equipment used during the investigation. Equipment blank frequency is 5 percent of samples taken (excluding QC samples).

4.7.1 Record Keeping

In addition to chain-of-custody records associated with sample handling, packaging, and shipping, certain standard forms will be completed for sample description and documentation. These shall include sample log sheets (for soil samples), daily activities record (for subcontractors), and logbooks.

The FOL will maintain a bound/weatherproof field notebook. The FOL, or designee, will record pertinent information related to sampling or field activities. This information may include sampling time, weather conditions, unusual events (e.g., well tampering), field measurements, site visitors, descriptions of photographs, etc. At the completion of field activities, the FOL shall submit to the TtNUS Task Order Manager (TOM) all field records, data, field notebooks, logbooks, chain-of-custody receipts, sample log sheets, daily logs, etc.

4.7.2 Investigation Derived Waste Management

Purge water and decontamination water will be collected and containerized in Department of Transportation approved (Specification 17C) 55-gallon drums. Each drum will be sealed, labeled, and transported to a pre-designated staging area designated by NAVSTA Mayport personnel (behind Building 1613) located within NAVSTA Mayport pending groundwater analytical results. All decontamination materials generated during the site investigation will be containerized for proper disposal. It is the responsibility of TtNUS to set up a contract with a licensed contractor for disposal of the investigation derived waste (IDW) following completion of the field sampling. Appropriate IDW documentation will be maintained in the project field log book. In addition to documenting the IDW in the field log book, an IDW management sheet will be filled for each drum stored at Building 1613, and a copy of this sheet will be provided to Diane Fears, NAVSTA Mayport Environmental Department, upon completion of field activities. See Appendix D for a copy of the IDW management sheet.

4.7.3 Equipment Calibration

The field instruments such as the water quality multimeter and turbidity meter will be calibrated daily and/or according to FDEP SOPs FT1000: General Field Testing and Measurement.

Calibration will be documented on an Equipment Calibration Log. During calibration, an appropriate maintenance check will be performed on each piece of equipment. If damaged or defective parts are identified during the maintenance check and it is determined that the damage could have an impact on the instrument's performance, the instrument will be removed from service until defective parts are repaired or replaced. A copy of the field calibration sheet is included in Appendix D.

4.8 DECONTAMINATION

The equipment involved in field sampling activities will be decontaminated prior to and during sampling activities in accordance to FDEP SOP FC1000.

All sampling equipment will be cleaned and decontaminated prior to use and after each subsequent use. Non-disposable equipment used for collecting samples will be decontaminated prior to beginning field sampling and between sample locations. After cleaning, equipment will only be handled by personnel wearing clean gloves to prevent recontamination. The following is a description of the materials to be used in the decontamination process and the procedures to be used for the specific types of equipment.

Specifications for Cleaning Materials:

1. Soap will be a standard phosphate-free laboratory detergent (e.g., Liquinox[®]).
2. Solvent will be pesticide-grade isopropanol.
3. Tap water may be from any municipal water system.
4. Analyte-free deionized water should contain no detectable heavy metals or other inorganic constituents.

Procedures for Sampling Equipment:

1. Remove all soils to the extent possible.
2. Through a combination of scrubbing using soap and/or steam cleaning remove visible dirt/soils.
3. Rinse with tap water.
4. Rinse equipment with pesticide grade isopropanol. Plastic items should not be solvent rinsed.
5. Rinse thoroughly with deionized water.
6. To the extent possible allow components to air dry.
7. If the device is to be used immediately, screen with a photoionization detector/flame ionization detector to ensure all solvents (if they were used) and trace contaminants have been adequately removed.
8. Remove from the decontamination area and cover with clean plastic. If equipment is to be stored overnight, it will be wrapped in aluminum foil and covered with clean, unused plastic.

Procedures for Water Level Meter:

1. Wash with soap and tap water.
2. Rinse with tap water.
3. Rinse with deionized water.

4.9 FIELD DOCUMENTATION

Field documentation for this assessment will include field logbooks, field log forms, location and sample identification nomenclature, and sample labels.

In addition to chain-of-custody records associated with sample handling, packaging, and shipping, certain standard forms will be completed for sample description and documentation. Dedicated field logbooks will be used to record pertinent field activities. The TOM's name, FOL's name, project name and location, and project number will be recorded on the inside of the front cover of all logbooks. Entries will be recorded with waterproof, non-erasable ink. Each page of the logbook will be numbered and dated. All logbook entries must be legible and contain accurate and complete information about an individual's project activities. At the end of all entries for a particular day, or a particular event if appropriate, the investigator will draw a diagonal line across the page below the last entry and initial indicating the

conclusion of entries. All entries will be objective, factual, and free of personal feelings. Corrections will be made by drawing a single line through the error and entering the correct data. All corrections will be initialed and dated.

4.10 DEMOBILIZATION

Demobilization will occur at the conclusion of all other field activities related to this investigation. Activities to occur during this phase include the installation of well tags on the new monitoring wells, return of all rental field equipment, verification of proper IDW documentation and staging by the FOL, and securing of the site.

4.11 SITE MANAGEMENT AND BASE SUPPORT

TtNUS will perform this project with support from the Navy. This section of the CAP describes the project contacts, support personnel, project milestones, and time frames of all major events.

Throughout the duration of the investigation activities, work at NAVSTA Mayport will be coordinated through NAVFAC SE, FDEP, Fleet and Industrial Supply Center (FISC), and NAVSTA Mayport personnel. The primary contacts are as follows:

- | | |
|--|---|
| <p>1. NAVFAC SE Ms. Beverly Washington 135 Ajax Street N. Building 135 Jacksonville, FL 32212-0030 (904) 542-5581</p> <p>2. FDEP Mr. John Winters 2600 Blair Stone Road Tallahassee, FL 32399 (850) 245-8999</p> | <p>3. FISC Mr. Wayne Wragg 8808 Somers Road Jacksonville, FL 32226-2600 (904) 696-6556, extension 200</p> <p>4. NAVSTA Mayport Environmental Department Ms. Diane Fears P.O. Box 280067 Jacksonville, FL 32228-0067 (904) 270-6730, extension 208</p> |
|--|---|

NAVSTA Mayport and FISC personnel will provide the following support functions:

- Provide existing engineering plans, drawings, diagrams, files, etc. to facilitate evaluation of the sites under investigation.
- Provide all historical data, background geological and hydrogeological information, and initial site investigation documents.

NAVSTA Mayport and FISC personnel will aid in arranging the following:

- Personnel identification badges, vehicle passes, and/or entry permits.
- A secure staging area (approximately 2,000 square feet) for storing equipment and supplies.
- A supply (e.g., fire hydrant, stand pipe, etc.) of large quantities of potable water for equipment cleaning, sampling, etc.
- As required, provide escorts for contract personnel working in secured areas.

The project will be staffed with personnel from the TtNUS' Jacksonville, Florida office. During field activities, TtNUS will provide an FOL who is familiar with the scope of work to be completed and requirements of working at NAVSTA Mayport. Additionally, TtNUS will supply a field crew to sample the groundwater monitoring wells.

Mr. Mark Peterson is the TOM for CLEAN IV CTO 0031 and will be the primary point of contact for the Station and the FOL. He is responsible for cost and schedule control as well as technical performance. Mr. Peterson will provide senior level review and oversight during field activities.

4.11.1 Contingency Plan

In the event of problems that may be encountered during site activities, the TtNUS TOM will be notified immediately, followed by the NAVFAC SE point of contact, and the NAVSTA Mayport point of contact. The TOM will determine a course of action so as to not interfere with the schedule or budget. Contingency plans will be approved through the NAVFAC SE point of contact before being enacted.

5.0 LABORATORY ANALYSIS

A fixed-base laboratory will be used to analyze groundwater samples for constituents identified in Table 4 1. Groundwater samples will be analyzed for constituents of concern including VOCs, 1-methylnaphthalene, 2-methylnaphthalene, TRPH, and the 16 method listed PAHs included in Table B of Chapter 62-770, F.A.C.

6.0 REPORTING

A report detailing the findings of this assessment will be submitted to FDEP on behalf of the Navy following completion of the field work. The report will use Chapter 62-777, F.A.C., contamination criteria to determine action levels of potential contaminants. The report will compare site conditions to the criteria in Chapter 62-780.680, F.A.C., and based on these results recommendations will be provided.

7.0 PROPOSED SCHEDULE

Field activities include monitoring well installation and development, groundwater sampling, surveying, and IDW management. The first sampling event has been conducted and laboratory results are pending. Additional events will be performed after Navy procurement is completed.

8.0 REFERENCES

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Aerostar, 2001c. Limited Closure Assessment Report Aboveground Storage Tank No. 204, Mayport Naval Station, Florida.

A. T. Kearney, Inc., 1989. RCRA Facility Assessment of the Naval Station Mayport, Florida.

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ESA, 2000b. Limited Closure Summary Report, Mayport Naval Station Fuel Depot Tanks # 203, Mayport Naval Station, Duval County , Florida.

Environmental Science and Engineering, Inc., 1986. Initial Assessment Study Naval Station Mayport, Florida.

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Team, 2008. Partnering Team Meeting Minutes. May.

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APPENDIX A

AST CLOSURE REPORTS

LIMITED CLOSURE SUMMARY REPORT

**Mayport Naval Station Fuel Depot
Tanks # 99, 100, 101
Mayport Naval Station, Duval County, Florida
Facility ID # 8626008**

Prepared for:

Environmental Recovery, Inc.
251 Levy Road
Atlantic Beach, Florida 32233

Prepared by:

Environmental Science Associates, Inc.
35 Jefferson Avenue
Ponte Vedra, Florida 32802
CompQAP #970173

June 2000

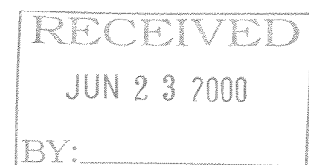


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Department of Environmental Protection

Twin Towers Office Building ♦ 2600 Blair Stone Road ♦ Tallahassee, Florida 32399-2400

DEP Form 62-761.900(8)
Form Title: Limited Closure
Summary Report
Effective Date: 7/13/98

Limited Closure Summary Report

This form is required for facilities that have sites with documented contamination requiring a site assessment in accordance with Chapter 62-770, F.A.C. This includes those facilities that are eligible for the Early Detection Incentive Program (EDI), the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP), and the Petroleum Cleanup Participation Program (PCPP), pursuant to Sections 376.3071 and 376.3072, F.S. Documentation of procedures followed, and results obtained during closure shall be reported in this form, along with any attachments. This form shall be submitted to the County within 60 days of completion of the closure in accordance with Section A of the "Storage Tank System Closure Assessment Requirements."

Complete All Applicable Blanks. Please Print or Type

General Information

| | | |
|--|--|-----------------------------|
| Date <u>4/25/00</u> | FDEP Facility ID Number <u>8626008</u> | County <u>Duval</u> |
| Facility Name <u>US Navy - Mayport Naval Station</u> | | Facility Telephone #: () |
| Facility Address: | | |
| Owner or Operator Name: <u>US NAVY</u> | | Owner/Operator phone #: () |
| Mailing Address: | | |

Storage Tank System Closure Information

1. Were the storage tanks(s): (Check one or both)

• Aboveground

Tanks #99, 100, 101 - Fuel Depot
• Underground

2. General System Information

Types of Products Stored: oil, wastewater

Number of Tanks Closed 3

Age(s) of Tanks 45 years

3. Was the Limited Closure Summary Report Performed as a Result of: (check one or more)

| | | |
|---|---------------------------------------|---|
| • Tank Systems Removal? <input checked="" type="checkbox"/> | • Spill Containment Installation? | • Change in Storage to a Non-Regulated Substance? |
| • Tank Systems Closed in Place? | • Dispenser Liners Installation? | • Release Prevention Barrier Installation? |
| • Piping Sump Installation? | • Secondary Containment Installation? | • Other? (please explain) |

4. Please Check Yes or No to the following:

| | | |
|---|--------------------------------------|-------------------------------------|
| a. Was there previously reported contamination discovered on site? If yes, was | <input checked="" type="radio"/> Yes | • No |
| 1. A Discharge Report Form submitted to the County? | <input checked="" type="radio"/> Yes | • No |
| 2. An investigation performed in accordance with Rule 62-761.820, F.A.C.? | <input checked="" type="radio"/> Yes | • No |
| b. Is the depth to groundwater less than 20 feet? | <input checked="" type="radio"/> Yes | • No |
| c. Are there monitoring wells on site? If yes, were they | <input checked="" type="radio"/> Yes | • No |
| 1. Groundwater monitoring wells? | <input checked="" type="radio"/> Yes | • No |
| 2. Vapor monitoring wells? | • Yes | <input checked="" type="radio"/> No |
| 3. Used for closure assessment sampling? | <input checked="" type="radio"/> Yes | • No |
| 4. Properly closed? | • Yes | <input checked="" type="radio"/> No |
| 5. Retained for site assessment purposes? | <input checked="" type="radio"/> Yes | • No |
| d. If tanks were replaced, were contaminated soils returned to the tank excavation? | • Yes | <input checked="" type="radio"/> No |

Signature of owner or operator

Richard Morant
Signature of person performing
Limited Closure Assessment

Richard Morant
Name of person performing
Limited Closure Assessment

(date)

(date)

4/25/00

Affiliation

ESA

Printed on recycled paper.

LIMITED CLOSURE SUMMARY REPORT

**Mayport Naval Station Fuel Depot
Tanks # 99, 100, 101
Mayport Naval Station, Duval County, Florida
Facility ID # 8626008**

Summary of Field Activities

On May 24 and 25, 2000 Environmental Science Associates, Inc. (ESA) was contracted by Environmental Recovery, Inc. (ERI) of Atlantic Beach, Florida (PSSSC #PC-C050751) to perform limited closure assessment services following the removal of three Waste Oil Underground Storage Tanks (UST's) from the Fuel Depot facility (Facility ID #8626008) located on Mayport Naval Station in Duval County, Florida (refer to Figure 1., Site Location Map). The purpose of the limited closure summary was to evaluate current site conditions in the vicinity of the tanks. Subsurface soil and groundwater contamination has been documented at the site in the past, and remedial activities have been conducted.

The tanks, which were each approximately 210,000-gallons in capacity, were reported to have been installed in 1954, and had been used to store oily wastewater. The limited closure assessment was conducted following the UST removals, and was performed in accordance with the requirements of Chapter 62-761 F.A.C. and the Florida Department of Environmental Protection (FDEP) guidance document "Pollutant Storage Tank Closure Assessment Requirements"(April 1998) for sites with previously documented contamination. The methods and procedures used during the closure assessment were conducted in accordance with the FDEP "Quality Assurance Standard Operating Procedures for Petroleum Storage System Closure Assessments".

As part of the limited closure assessment, total of three groundwater samples were collected from three (3) pre-existing monitoring wells located on the north side of the tank farm. In addition, a total of three groundwater samples were collected from temporary wells installed on site in selected locations, and a total of three soil samples were collected from soil borings conducted on site for. Each of these samples were

Three (3) pre-existing monitor wells (# MW -15S, # MW-03S, and # MW-13S) were sampled on April 24, 2000. Prior to initiating groundwater sample collection activities, the depth to groundwater and total depth of each well was measured using an electronic water level indicator. The depth to groundwater was determined to be approximately 9 to 10 ft below the original surface grade. A total of five well volumes were purged from each well prior to groundwater sample collection. Well purging and groundwater sample collection of the permanently installed wells was conducted using Teflon bailers. The groundwater samples were placed in laboratory prepared sample containers, appropriately preserved, labeled, sealed in zip-lock type bags, placed on wet ice, and hand-delivered under chain-of-custody procedures to the designated laboratory for analysis. The results of the groundwater analysis is summarized in Table 1, and copies of the laboratory reports and chain of custody forms are provided in Attachment A. Copies of the well sampling field logs are

provided in Attachment B. The results of the laboratory analysis of the groundwater samples collected from the existing monitor wells (#MW-15S, MW-03S, and MW-13S) indicated the presence of petroleum contamination, with the concentrations of Naphthalene ($140\mu\text{g/L}$) and Total Petroleum Hydrocarbons (Fl-PRO, 15mg/L) in excess of the FDEP Groundwater Cleanup Target Levels, as specified by Chapter 62-775, F.A.C., Table I.

On May 25, 2000, confirmatory soil samples were collected, and temporary wells were installed and sampled in the vicinity of Tanks # 100 and 101.

A total of three (3) confirmatory soil samples were collected from soil borings conducted in proximity to the former tank locations, as follows:

- Confirmatory Soil Sample #CS-1 was collected from the south side of Tank #100. Based on the lack of apparent indications of the presence of soil contamination, the sample was collected at a depth of approximately 8.0 ft below the original surface grade, which was just above the level of groundwater saturation, and below the bottom of Tank 100.
- Confirmatory Soil Sample #CS-2 was collected from the south side of Tank #101. Based on the lack of apparent indications of soil contamination, the sample was collected at a depth of approximately 8.0 ft below the original surface grade, which was just above the level of groundwater saturation, and below the bottom of Tank 101.
- Confirmatory Soil Sample #CS-3 was collected from the midpoint between the location of Tank #100 and 101. Based on the lack of apparent indications of soil contamination, The sample was collected at a depth of approximately 8.0 below the original surface grade, which was just above the level of groundwater saturation, and below the bottom of Tanks #100 and 101.

Each of these samples were collected using a stainless steel hand auger and Encore® brand samplers. Sampling equipment was decontaminated between sampling locations to prevent the possibility of cross-contamination. The samples were placed into pre-cleaned, laboratory supplied sample containers, appropriately labeled, sealed in zip-lock type bags and placed on wet ice for transport, and hand-delivered to a FDEP-approved laboratory (ENCO Laboratories, Jacksonville) for analysis by the following methods:

| | |
|-----------------|--------------------------------|
| EPA Method 8260 | Volatile Organic Compounds |
| EPA Method 8270 | Extractable Organic Compounds |
| Fla-PRO | Total Petroleum Hydrocarbons |
| RCRA Metals | As, Ba, Cd, Cr, Pb, Hg, Ag, Se |

The results of the laboratory analysis of the soil samples were below laboratory detection limits for all chemicals of concern, with the exception of Arsenic, which was detected in soil samples #CS-1 and CS-2 at concentrations of 1.2 mg/Kg and 1.5 mg/Kg , respectively, as well as Chromium

and Lead, which were detected in soil sample #CS-1 at concentrations of 1.0 mg/Kg and 4.4 mg/Kg, respectively. The results of the soil analysis are summarized in Table 2, and soil sampling locations are illustrated in Figure 3.

Following confirmatory soil sample collection, each of the three (3) soil borings were advanced below the top of the water table and temporary monitor wells were installed and sampled. Each of the temporary wells (TMW-1, TMW-2 and TMW-3) were constructed of 2-inch PVC with 5 ft of 0.01.-inch slotted well screen, and was installed such that the well screen intercepted the top of the water table, which was encountered at a depth of approximately 9 ft below surface grade, and the annular space around the well screen was filled with clean 6/20 grade sand pack. Prior to sample collection, each temporary well was purged a total of five (5) standing volumes using a portable peristaltic pump. Groundwater samples were collected from each temporary well using a Teflon bailer. Sample containers, which had been provided by the designated laboratory, were appropriately labeled, preserved, sealed in zip-lock type bags, placed on wet ice, and hand-delivered, under standard chain of custody procedures, to an FDEP-approved environmental laboratory (ENCO Laboratories, Jacksonville) for analysis, as follows:

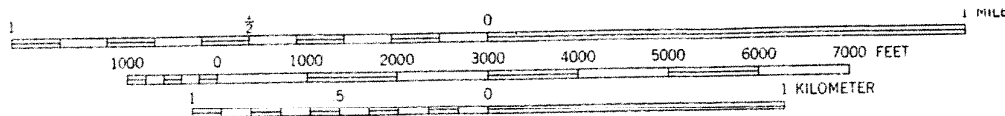
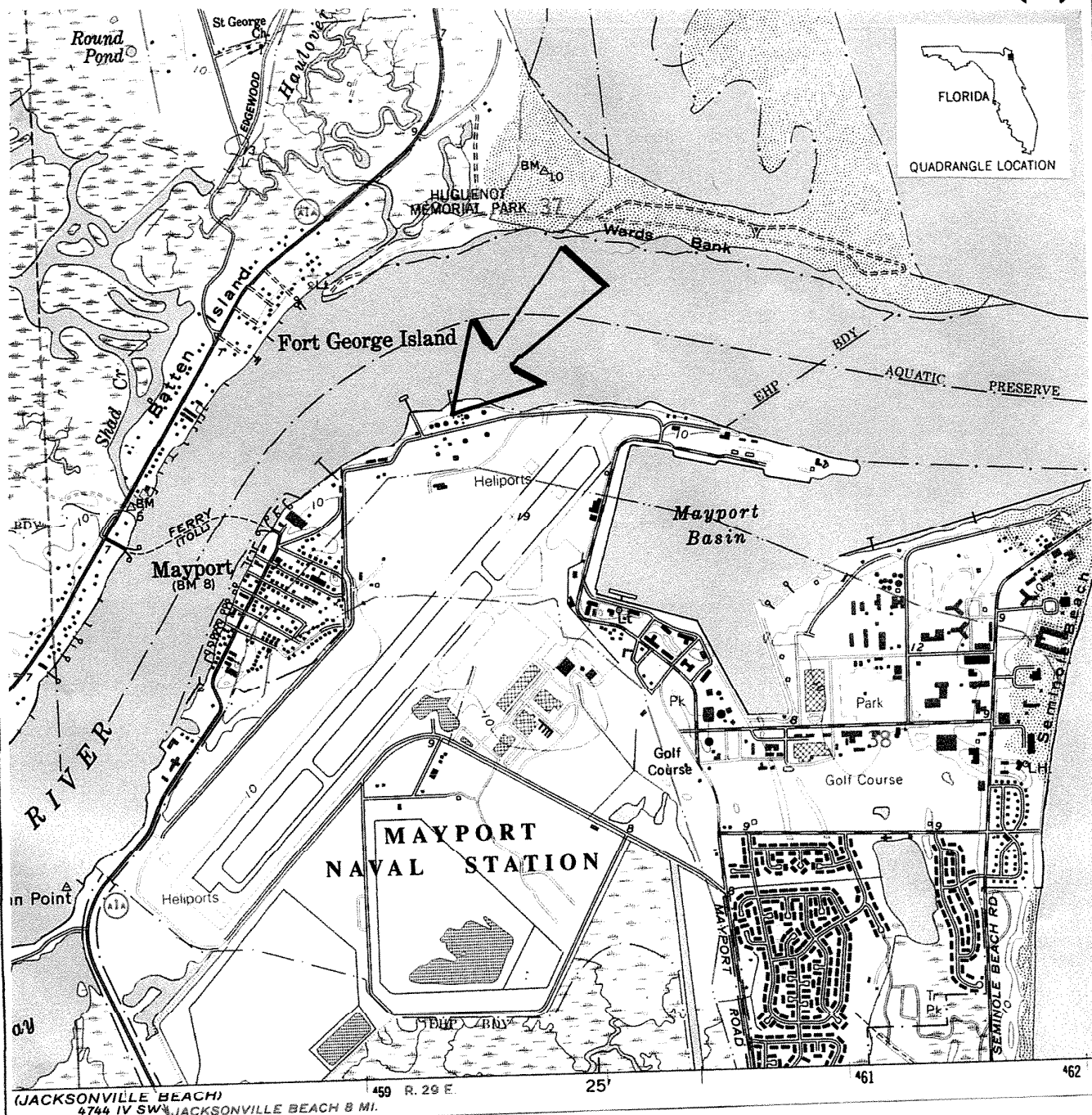
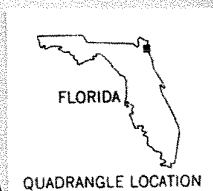
| | |
|-----------------|--------------------------------|
| EPA Method 8260 | Volatile Organic Compounds |
| EPA Method 8270 | Extractable Organic Compounds |
| Fla-PRO | Total Petroleum Hydrocarbons |
| RCRA Metals | As, Ba, Cd, Cr, Pb, Hg, Ag, Se |

The results of the laboratory analysis of the groundwater samples collected from temporary monitor wells # TMW-1, TMW-2, and TMW-3 are summarized in Table 3, and temporary well locations are illustrated in Figure 2. The results of the laboratory analysis of the groundwater samples collected from the temporary monitor wells indicated concentrations of petroleum hydrocarbons, including present in each of the wells, with the concentration of Naphthalene detected in TMW-2 (120 μ g/L) and the concentration of Lead detected in TMW-1 (0.074mg/L) in excess of the FDEP Groundwater Cleanup Target Levels, as specified by Chapter 62-775, F.A.C., Table I. Copies of the laboratory report of the groundwater analysis are provided in Attachment A, and the temporary well locations are illustrated in Figure 2.

Copies of the laboratory reports of the soil and groundwater analysis are provided as Attachment A. Also included in the limited closure summary report is a site location map, a site sketch indicating soil and groundwater sampling locations relative to the former tank locations, as well as the results of the laboratory analysis in table form.

Respectfully Submitted,
Environmental Science Associates, Inc.

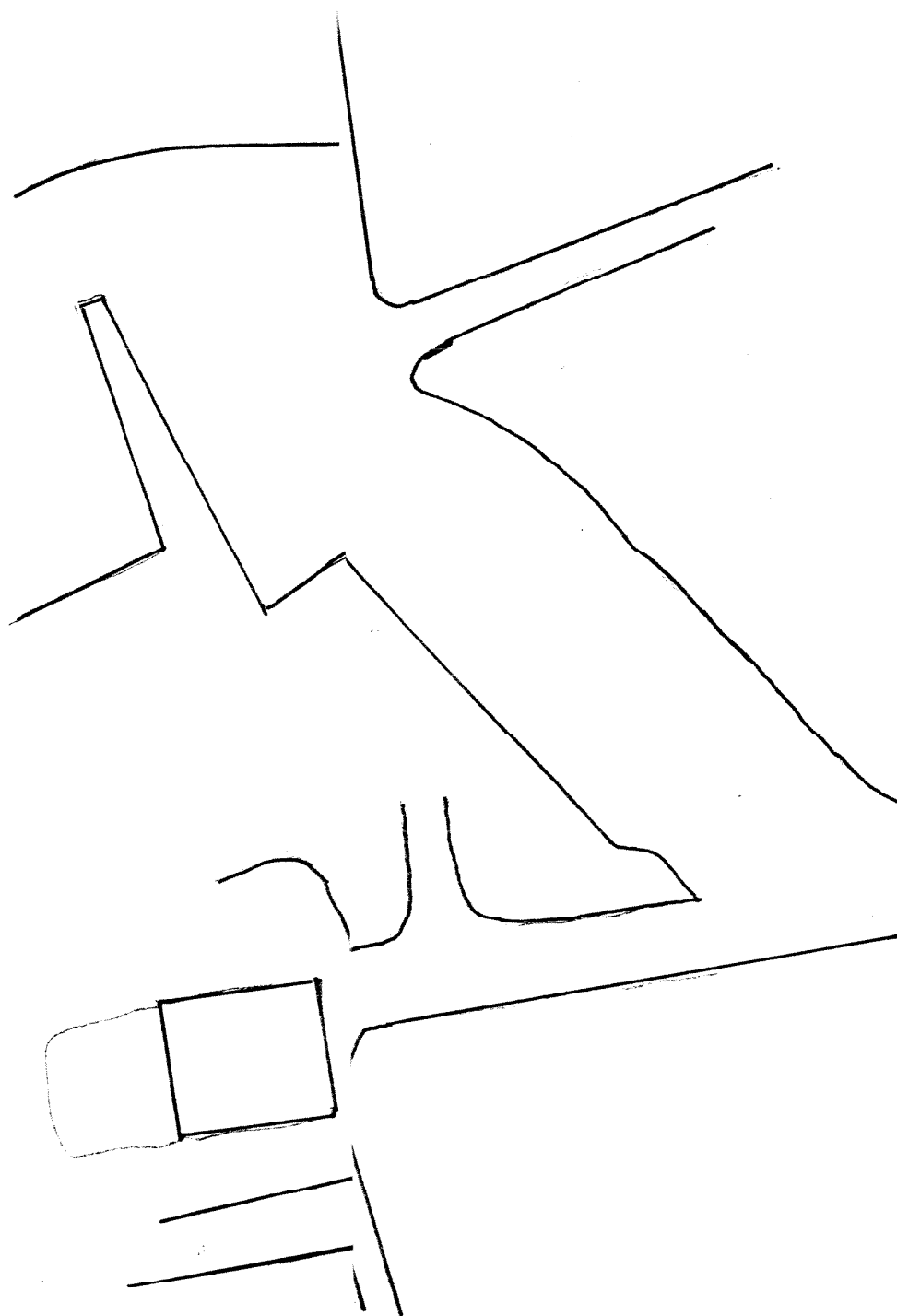
Richard Moriarty
Environmental Scientist



Environmental
Science
Associates, Inc.

Site Location Map
Limited Closure Summary, Tanks #99, 100, and 101
Mayport Naval Station Fuel Depot
Mayport Naval Station, Duval County, Florida; Facility ID #8626008

FIGURE
1
PROJECT NO.



**Environmental
Science
Associates, Inc.**

| | INITIAL | DATE |
|------------------|---------|------|
| DRAWN BY: | | |
| REVIEWED BY: | | |
| PROJECT MANAGER: | | |

FIGURE

2

PROJECT NO.

Table 1.
Summary of Laboratory Analysis
Groundwater Sampling - Monitor Wells # MW-15S, MW-03S, and MW-13S
Mayport Naval Station Fuel Depot, Tanks # 99, 100, and 101
Mayport Naval Station, Duval County, Florida

| Parameter | Monitor Well ID # | | | Groundwater Cleanup Target Levels* |
|---|-------------------|------------|------------|---------------------------------------|
| | MW-15S | MW-03S | MW-13S | |
| Volatile Organic Compounds: | | | | |
| (EPA Method 8260) | | | | |
| Isopropylbenzene | 2.6µg/L | BDL | BDL | N/A |
| 1,2,3-Trichlorobenzene | 1.8µg/L | BDL | BDL | 70µg/L |
| N-Propylbenzene | 3.3µg/L | BDL | BDL | N/A |
| Tert-Butylbenzene | 2.7µg/L | BDL | BDL | N/A |
| S-Butylbenzene | 5.6µg/L | BDL | BDL | N/A |
| P-Isopropyloluene | 3.7µg/L | BDL | BDL | N/A |
| N-Butylbenzene | 6.8µg/L | BDL | BDL | N/A |
| Naphthalene | 140µg/L | 9.2µg/L | 4.8µg/L | 20µg/L |
| All other 8260 Compounds | BDL | BDL | BDL | N/A |
| Semi-Volatile Organic Compounds: | | | | |
| (EPA Method 8270) | | | | |
| Bis(2-ethylhexylphthalate | 14µg/L | BDL | BDL | N/A |
| Flourene | 17µg/L | BDL | BDL | 280µg/L |
| 1-Methylnaphthalene | 100µg/L | BDL | BDL | 20µg/L |
| 2-Methylnaphthalene | 90µg/L | BDL | BDL | 20µg/L |
| Naphthalene | 48µg/L | BDL | 4.8µg/L | 20µg/L |
| Phenanthrene | 22µg/L | BDL | BDL | 210µg/L |
| All other 8270 Compounds | BDL | BDL | BDL | N/A |
| FLA PRO: | 15mg/L | BDL | BDL | 5mg/L |
| Total RCRA Metals: | | | | |
| Arsenic | BDL | 0.012mg/L | 0.011mg/L | 50µg/L |
| Barium | BDL | BDL | BDL | 2000µg/L |
| Cadmium | BDL | BDL | 0.002mg/L | 5µg/L |
| Chromium | BDL | BDL | 0.031mg/L | 100µg/L |
| Lead | BDL | BDL | 0.009mg/L | 15µg/L |
| Mercury | 0.00022mg/L | BDL | BDL | 2µg/L |
| Silver | BDL | BDL | BDL | 50µg/L |
| Selenium | BDL | BDL | BDL | 50µg/L |

BDL = Below Detection Limits; N/A = Not Applicable

*Groundwater Cleanup Target Levels as per 62-775 F.A.C., Table I, Groundwater Cleanup Target Levels

Table 2.
Summary of Laboratory Analysis
Confirmatory Soil Sampling
Mayport Naval Station Fuel Depot, Tanks # 99, 100, and 101
Mayport Naval Station, Duval County, Florida

| Parameter | Confirmatory Soil Sample ID | | | FDEP Soil Cleanup Target Levels* | |
|---|-----------------------------|----------|------|-------------------------------------|----------|
| | CS-1 | CS-2 | CS-3 | | |
| Volatile Organic Compounds: | | | | | |
| (EPA Method 8260) | | | | | |
| All 8260 Compounds | BDL | BDL | BDL | N/A | |
| Semi-Volatile Organic Compounds: | | | | | |
| (EPA Method 8270) | | | | | |
| All 8270 Compounds | BDL | BDL | BDL | N/A | |
| FLA PRO: | BDL | BDL | BDL | 340mg/Kg | 340mg/Kg |
| Total RCRA Metals: | | | | | |
| Arsenic | 1.0mg/Kg | 1.5mg/Kg | BDL | 3.7mg/Kg | 29mg/Kg |
| Barium | BDL | BDL | BDL | 87000mg/Kg | TCLP |
| Cadmium | BDL | BDL | BDL | 1300mg/Kg | 8mg/Kg |
| Chromium | 1.0mg/Kg | BDL | BDL | 420mg/Kg | 38mg/Kg |
| Lead | 4.0mg/Kg | BDL | BDL | 920mg/Kg | TCLP |
| Mercury | BDL | BDL | BDL | 28mg/Kg | TCLP |
| Silver | BDL | BDL | BDL | 9100mg/Kg | TCLP |
| Selenium | BDL | BDL | BDL | 10000mg/Kg | TCLP |

BDL = Below Detection Limits; N/A = Not Applicable

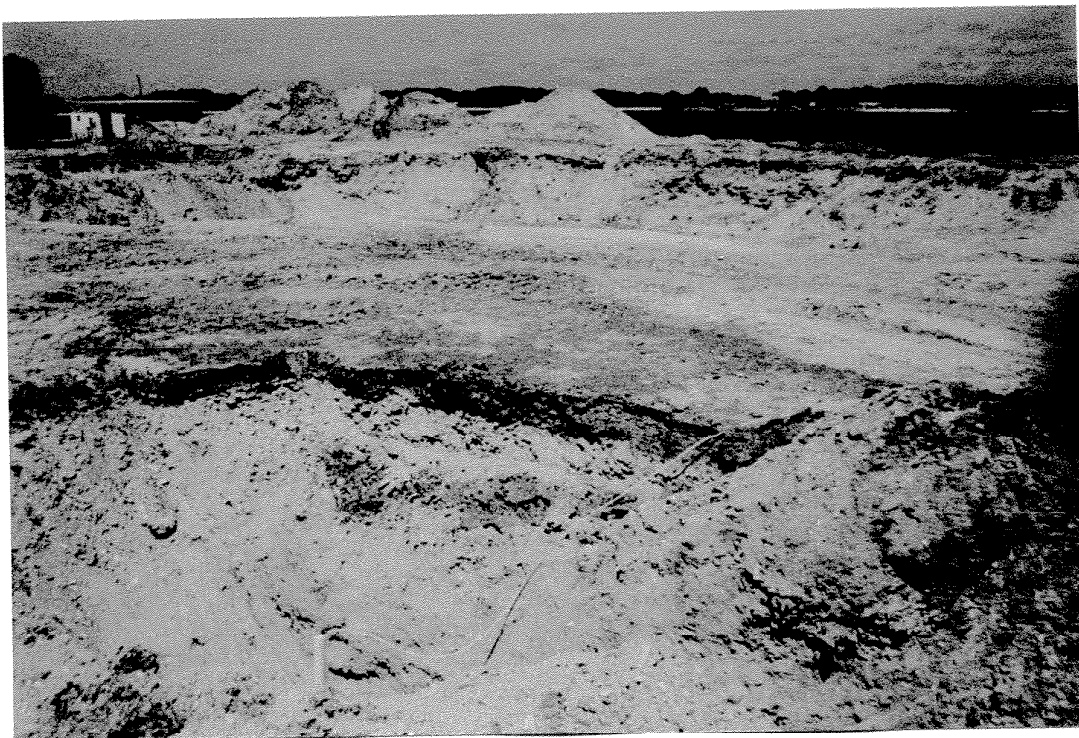
*Soil Cleanup Target Levels as per 62-775 F.A.C., Table II, Direct Exposure, Industrial Use Assumption/Leachability

Table 3.
Summary of Laboratory Analysis
Groundwater Sampling - Temporary Monitor Wells #TMW-1, TMW-2, and TMW-3
Mayport Naval Station Fuel Depot, Tanks # 99, 100, and 101
Mayport Naval Station, Duval County, Florida

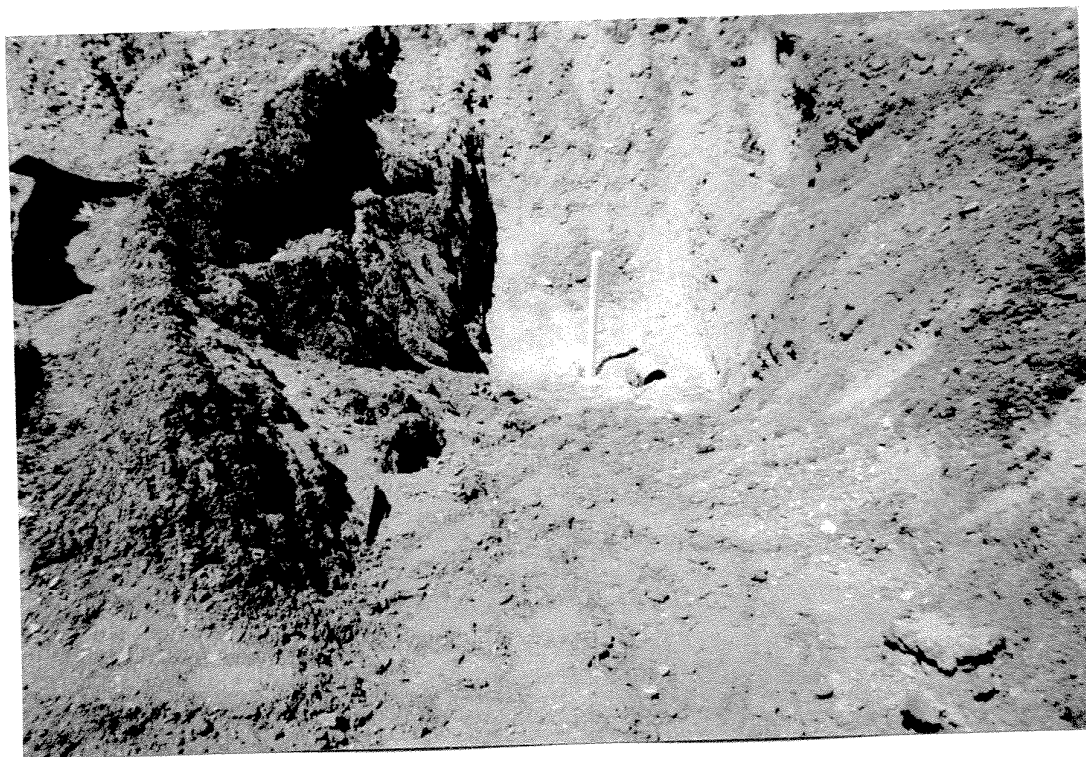
| Parameter | Monitor Well ID # | | | Groundwater Cleanup Target Levels* |
|---|-------------------|---------|-----------|---------------------------------------|
| | TMW-1 | TMW-2 | TMW-3 | |
| Volatile Organic Compounds: | | | | |
| (EPA Method 8260) | | | | |
| Isopropylbenzene | 22µg/L | 13µg/L | BDL | N/A |
| MTBE | BDL | 28µg/L | BDL | 70µg/L |
| N-Propylbenzene | 44µg/L | 25µg/L | BDL | N/A |
| Tert-Butylbenzene | BDL | 2.6µg/L | BDL | N/A |
| S-Butylbenzene | BDL | 15µg/L | BDL | N/A |
| P-Isopropyloluene | BDL | BDL | BDL | N/A |
| N-Butylbenzene | BDL | 10µg/L | BDL | N/A |
| Naphthalene | BDL | 120µg/L | 8.5µg/L | 20µg/L |
| All other 8260 Compounds | BDL | BDL | BDL | N/A |
| Semi-Volatile Organic Compounds: | | | | |
| (EPA Method 8270) | | | | |
| 1-Methylnaphthalene | BDL | 46µg/L | BDL | 20µg/L |
| 2-Methylnaphthalene | BDL | 45µg/L | BDL | 20µg/L |
| Naphthalene | BDL | 42µg/L | BDL | 20µg/L |
| All other 8270 Compounds | BDL | BDL | BDL | N/A |
| FLA PRO: | BDL | BDL | BDL | 5mg/L |
| Total RCRA Metals: | | | | |
| Arsenic | BDL | BDL | BDL | 50µg/L |
| Barium | BDL | BDL | BDL | 2000µg/L |
| Cadmium | BDL | BDL | 0.001mg/L | 5µg/L |
| Chromium | BDL | BDL | BDL | 100µg/L |
| Lead | 0.074mg/L | BDL | BDL | 15µg/L |
| Mercury | BDL | BDL | BDL | 2µg/L |
| Silver | BDL | BDL | BDL | 50µg/L |
| Selenium | BDL | BDL | BDL | 50µg/L |

BDL = Below Detection Limits; N/A = Not Applicable

*Groundwater Cleanup Target Levels as per 62-775 F.A.C., Table I, Groundwater Cleanup Target Levels



1. Photograph facing generally northwest, overlooking former tank locations.



2. Photograph overlooking typical Temporary Monitor Well (TMW-3)

Photodocumentation: Limited Closure Summary, May 25, 2000
Tanks 99, 100, and 101, Mayport Naval Station Fuel Farm
Mayport Naval Station, Duval County, Florida; Facility ID # 8626008

ATTACHMENT A

Laboratory Reports

Environmental Conservation Laboratories, Inc.
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210
www.encolabs.com



DHRS Certification No. E82277

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX10968
DATE SUBMITTED: April 25, 2000
DATE REPORTED : May 3, 2000

PAGE 1 OF 65

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT : 2007

Mayport Naval Station

| | | | | | |
|----|---|--------|---|-------|------------|
| #1 | - | MW-15S | @ | 13:45 | (04/24/00) |
| #2 | - | MW-03S | @ | 14:15 | (04/24/00) |
| #3 | - | MW-13S | @ | 14:45 | (04/24/00) |
| #4 | - | TMW-1 | @ | 11:40 | (04/25/00) |
| #5 | - | TMW-2 | @ | 12:20 | (04/25/00) |
| #6 | - | TMW-3 | @ | 12:45 | (04/25/00) |
| #7 | - | CS-1 | @ | 09:15 | (04/25/00) |
| #8 | - | CS-2 | @ | 10:00 | (04/25/00) |
| #9 | - | CS-3 | @ | 10:30 | (04/25/00) |

PROJECT MANAGER


Scott D. Martin

ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICSMW-15SMW-03SUnits

| | | | |
|-------------------------|-------|-------|------|
| Dichlorodifluoromethane | 2.0 U | 2.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 2.0 U | 2.0 U | µg/L |
| Chloroethane | 2.0 U | 2.0 U | µg/L |
| Trichlorofluoromethane | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Acetone | 50 U | 50 U | µg/L |
| Carbon Disulfide | 50 U | 50 U | µg/L |
| Methylene Chloride | 5.0 U | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methyl tert-butyl ether | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| 2,2-Dichloropropane | 2.0 U | 2.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 2-Butanone | 20 U | 20 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Dibromomethane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

PAGE 3 OF 65

RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| | MW-15S | MW-03S | Units |
|---------------------------|--------|--------|-------|
| 2-Chloroethyl vinyl ether | 6.0 U | 6.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 4-Methyl-2-pentanone | 20 U | 20 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 3.0 U | 3.0 U | µg/L |
| 1,3-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| 2-Hexanone | 20 U | 20 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| 1,2-Dibromoethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,1,1,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 2.0 U | 2.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| Styrene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| Isopropylbenzene | 2.6 I | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| Bromobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2,3-Trichlorobenzene | 1.8 | 1.0 U | µg/L |
| n-Propylbenzene | 3.3 | 1.0 U | µg/L |
| 2-Chlorotoluene | 1.0 U | 1.0 U | µg/L |
| 1,3,5-Trimethylbenzene | 1.0 U | 1.0 U | µg/L |
| 4-Chlorotoluene | 1.0 U | 1.0 U | µg/L |

U = Compound was analyzed for but not detected to the level shown.

I = Analyte detected; value is between the Method Detection Level (MDL)
and the Practical Quantitation Level (PQL).

ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| | MW-15S | MW-03S | Units |
|-----------------------------|--------|--------|-------|
| tert-Butylbenzene | 2.7 | 1.0 U | µg/L |
| 1,2,4-Trimethylbenzene | 1.0 U | 1.0 U | µg/L |
| s-Butylbenzene | 5.6 | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| p-Isopropyltoluene | 3.7 | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| n-Butylbenzene | 6.8 | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dibromo-3-chloropropane | 1.0 U | 1.0 U | µg/L |
| 1,2,4-Trichlorobenzene | 1.0 U | 1.0 U | µg/L |
| Hexachlorobutadiene | 1.0 U | 1.0 U | µg/L |
| Naphthalene | 140 | 9.2 | µg/L |
| 1,2,3-Trichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromochloromethane | 1.0 U | 1.0 U | µg/L |

Surrogate:

| | % RECOV | % RECOV | LIMITS |
|----------------------|----------|----------|--------|
| Dibromofluoromethane | 93 | 88 | 38-143 |
| D8-Toluene | 92 | 100 | 78-126 |
| Bromofluorobenzene | 98 | 104 | 72-132 |
| Date Analyzed | 05/01/00 | 05/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

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RESULTS OF ANALYSIS

EPA METHOD 8270 -

SEMIVOLATILE ORGANICSMW-15SMW-03SUnits

| | | | |
|-------------------------------|------|------|------|
| Acenaphthene | 10 U | 10 U | µg/L |
| Acenaphthylene | 10 U | 10 U | µg/L |
| Anthracene | 10 U | 10 U | µg/L |
| Benzidine | 10 U | 10 U | µg/L |
| Benzo (a) anthracene | 10 U | 10 U | µg/L |
| Benzo (b) fluoranthene | 10 U | 10 U | µg/L |
| Benzo (k) fluoranthene | 10 U | 10 U | µg/L |
| Benzo (g,h,i) perylene | 10 U | 10 U | µg/L |
| Benzo (a) pyrene | 10 U | 10 U | µg/L |
| Benzylbutyl phthalate | 10 U | 10 U | µg/L |
| Bis (2-chloroethoxy) methane | 10 U | 10 U | µg/L |
| Bis (2-chloroethyl) ether | 10 U | 10 U | µg/L |
| Bis (2-chloroisopropyl) ether | 10 U | 10 U | µg/L |
| Bis (2-ethylhexyl) phthalate | 14 | 10 U | µg/L |
| 4-Bromophenylphenyl ether | 10 U | 10 U | µg/L |
| 2-Chloronaphthalene | 10 U | 10 U | µg/L |
| 4-Chlorophenyl phenyl ether | 10 U | 10 U | µg/L |
| Chrysene | 10 U | 10 U | µg/L |
| Dibenzo (a,h) anthracene | 10 U | 10 U | µg/L |
| 1,2-Dichlorobenzene | 10 U | 10 U | µg/L |
| 1,3-Dichlorobenzene | 10 U | 10 U | µg/L |
| 1,4-Dichlorobenzene | 10 U | 10 U | µg/L |
| 3,3'-Dichlorobenzidine | 20 U | 20 U | µg/L |
| Diethyl phthalate | 10 U | 10 U | µg/L |
| Dimethyl phthalate | 10 U | 10 U | µg/L |
| Di-n-butyl phthalate | 10 U | 10 U | µg/L |
| Di-n-octyl phthalate | 10 U | 10 U | µg/L |
| 2,4-Dinitrotoluene | 10 U | 10 U | µg/L |
| 2,6-Dinitrotoluene | 10 U | 10 U | µg/L |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

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RESULTS OF ANALYSIS

EPA METHOD 8270 (cont.) -
SEMIVOLATILE ORGANICSMW-15SMW-03SUnits

| | | | |
|---------------------------|------|------|------|
| Fluoranthene | 10 U | 10 U | µg/L |
| Fluorene | 17 | 10 U | µg/L |
| Hexachlorobenzene | 10 U | 10 U | µg/L |
| Hexachlorobutadiene | 10 U | 10 U | µg/L |
| Hexachlorocyclopentadiene | 10 U | 10 U | µg/L |
| Hexachloroethane | 10 U | 10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 10 U | 10 U | µg/L |
| Isophorone | 10 U | 10 U | µg/L |
| 1-Methylnaphthalene | 100 | 10 U | µg/L |
| 2-Methylnaphthalene | 90 | 10 U | µg/L |
| Naphthalene | 48 | 10 U | µg/L |
| Nitrobenzene | 10 U | 10 U | µg/L |
| N-Nitrosodimethylamine | 10 U | 10 U | µg/L |
| N-Nitrosodi-n-propylamine | 10 U | 10 U | µg/L |
| N-Nitrosodiphenylamine | 10 U | 10 U | µg/L |
| Phenanthrene | 22 | 10 U | µg/L |
| Pyrene | 10 U | 10 U | µg/L |
| 1,2,4-Trichlorobenzene | 10 U | 10 U | µg/L |
| Benzyl Alcohol | 10 U | 10 U | µg/L |
| Benzoic Acid | 10 U | 10 U | µg/L |
| 4-Chloroaniline | 10 U | 10 U | µg/L |
| 2-Nitroaniline | 10 U | 10 U | µg/L |
| 3-Nitroaniline | 10 U | 10 U | µg/L |
| 4-Nitroaniline | 10 U | 10 U | µg/L |
| Dibenzofuran | 10 U | 10 U | µg/L |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

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RESULTS OF ANALYSIS

EPA METHOD 8270 (cont.) -
SEMIVOLATILE ORGANICS

| | <u>MW-15S</u> | <u>MW-03S</u> | <u>Units</u> |
|----------------------------|----------------|----------------|---------------|
| Pyridine | 10 U | 10 U | µg/L |
| 4-Chloro-3-methylphenol | 10 U | 10 U | µg/L |
| 2-Chlorophenol | 10 U | 10 U | µg/L |
| 2,4-Dichlorophenol | 10 U | 10 U | µg/L |
| 2,4-Dimethylphenol | 10 U | 10 U | µg/L |
| 2,4-Dinitrophenol | 50 U | 50 U | µg/L |
| 2-Methyl-4,6-dinitrophenol | 30 U | 30 U | µg/L |
| 2-Nitrophenol | 10 U | 10 U | µg/L |
| 4-Nitrophenol | 10 U | 10 U | µg/L |
| Pentachlorophenol | 10 U | 10 U | µg/L |
| Phenol | 10 U | 10 U | µg/L |
| 2,4,6-Trichlorophenol | 10 U | 10 U | µg/L |
| 2-Methylphenol | 10 U | 10 U | µg/L |
| 3 & 4-Methylphenol | 10 U | 10 U | µg/L |
| 2,4,5-Trichlorophenol | 10 U | 10 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Nitrobenzene -D5 | 71 | 56 | 30-106 |
| 2-Fluorobiphenyl | 90 | 75 | 38-107 |
| Terphenyl -D14 | 117 | 126 | 29-131 |
| Phenol -D5 | 47 | 41 | 12-87 |
| 2-Fluorophenol | 50 | 51 | 19-115 |
| 2,4,6-Tribromophenol | #132 | 118 | 35-126 |
| Date Extracted | 04/28/00 | 04/28/00 | |
| Date Analyzed | 04/28/00 | 04/28/00 | |

= Surrogate recovery was outside of laboratory established limits.

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>MW-15S</u> | <u>MW-03S</u> | <u>Units</u> |
|------------------------------|---------------|----------------|----------------|---------------|
| Arsenic | 200.7 | 0.010 U | 0.012 I | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Barium | 200.7 | 0.10 U | 0.10 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Cadmium | 200.7 | 0.0010 U | 0.0010 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Chromium | 200.7 | 0.010 U | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Mercury | 245.1 | 0.00022 I | 0.00020 U | mg/L |
| Date Analyzed | | 04/27/00 | 04/27/00 | |
| Selenium | 200.7 | 0.010 U | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Silver | 200.7 | 0.010 U | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| <u>EPA METHOD FLPRO -</u> | | | | |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| | | <u>MW-15S</u> | <u>MW-03S</u> | <u>Units</u> |
| Hydrocarbons (C8-C40) | | 15 D1 | 0.20 U | mg/L |
| <u>Surrogate:</u> | | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | | 93 | 67 | 65-140 |
| Date Extracted | | 05/01/00 | 05/01/00 | |
| Date Analyzed | | 05/02/00 | 05/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).

D1 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | MW-13S | TMW-1 | Units |
|-------------------------|--------|----------|-------|
| Dichlorodifluoromethane | 2.0 U | 10 U D1 | µg/L |
| Chloromethane | 1.0 U | 5.0 U D1 | µg/L |
| Vinyl Chloride | 1.0 U | 5.0 U D1 | µg/L |
| Bromomethane | 2.0 U | 10 U D1 | µg/L |
| Chloroethane | 2.0 U | 10 U D1 | µg/L |
| Trichlorofluoromethane | 1.0 U | 5.0 U D1 | µg/L |
| 1,1-Dichloroethene | 1.0 U | 5.0 U D1 | µg/L |
| Acetone | 50 U | 250 U D1 | µg/L |
| Carbon Disulfide | 50 U | 250 U D1 | µg/L |
| Methylene Chloride | 5.0 U | 25 U D1 | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 5.0 U D1 | µg/L |
| Methyl tert-butyl ether | 1.0 U | 5.0 U D1 | µg/L |
| 1,1-Dichloroethane | 1.0 U | 5.0 U D1 | µg/L |
| 2,2-Dichloropropane | 2.0 U | 10 U D1 | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 5.0 U D1 | µg/L |
| 2-Butanone | 20 U | 100 U D1 | µg/L |
| Chloroform | 1.0 U | 5.0 U D1 | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 5.0 U D1 | µg/L |
| Carbon tetrachloride | 1.0 U | 5.0 U D1 | µg/L |
| 1,1-Dichloropropene | 1.0 U | 5.0 U D1 | µg/L |
| Benzene | 1.0 U | 5.0 U D1 | µg/L |
| 1,2-Dichloroethane | 1.0 U | 5.0 U D1 | µg/L |
| Trichloroethene | 1.0 U | 5.0 U D1 | µg/L |
| 1,2-Dichloropropane | 1.0 U | 5.0 U D1 | µg/L |
| Dibromomethane | 1.0 U | 5.0 U D1 | µg/L |
| Bromodichloromethane | 1.0 U | 5.0 U D1 | µg/L |

U = Compound was analyzed for but not detected to the level shown.

D1 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

MW-13S

TMW-1

Units

| | | | | |
|---------------------------|-------|-------|----|------|
| 2-Chloroethyl vinyl ether | 6.0 U | 30 U | D1 | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 5.0 U | D1 | µg/L |
| 4-Methyl-2-pentanone | 20 U | 100 U | D1 | µg/L |
| Toluene | 1.0 U | 5.0 U | D1 | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 5.0 U | D1 | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 5.0 U | D1 | µg/L |
| Tetrachloroethene | 3.0 U | 15 U | D1 | µg/L |
| 1,3-Dichloropropane | 1.0 U | 5.0 U | D1 | µg/L |
| 2-Hexanone | 20 U | 100 U | D1 | µg/L |
| Dibromochloromethane | 1.0 U | 5.0 U | D1 | µg/L |
| 1,2-Dibromoethane | 1.0 U | 5.0 U | D1 | µg/L |
| Chlorobenzene | 1.0 U | 5.0 U | D1 | µg/L |
| 1,1,1,2-Tetrachloroethane | 1.0 U | 5.0 U | D1 | µg/L |
| Ethylbenzene | 1.0 U | 5.0 U | D1 | µg/L |
| m-Xylene & p-Xylene | 2.0 U | 10 U | D1 | µg/L |
| o-Xylene | 1.0 U | 5.0 U | D1 | µg/L |
| Styrene | 1.0 U | 5.0 U | D1 | µg/L |
| Bromoform | 1.0 U | 5.0 U | D1 | µg/L |
| Isopropylbenzene | 1.0 U | 22 | D1 | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 5.0 U | D1 | µg/L |
| Bromobenzene | 1.0 U | 5.0 U | D1 | µg/L |
| 1,2,3-Trichlorobenzene | 1.0 U | 5.0 U | D1 | µg/L |
| n-Propylbenzene | 1.0 U | 44 | D1 | µg/L |
| 2-Chlorotoluene | 1.0 U | 5.0 U | D1 | µg/L |
| 1,3,5-Trimethylbenzene | 1.0 U | 5.0 U | D1 | µg/L |
| 4-Chlorotoluene | 1.0 U | 5.0 U | D1 | µg/L |

U = Compound was analyzed for but not detected to the level shown.

D1 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| | MW-13S | TMW-1 | Units |
|-----------------------------|--------|----------|-------|
| tert-Butylbenzene | 1.0 U | 5.0 U D1 | µg/L |
| 1,2,4-Trimethylbenzene | 1.0 U | 5.0 U D1 | µg/L |
| s-Butylbenzene | 1.0 U | 5.0 U D1 | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 5.0 U D1 | µg/L |
| p-Isopropyltoluene | 1.0 U | 5.0 U D1 | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 5.0 U D1 | µg/L |
| n-Butylbenzene | 1.0 U | 5.0 U D1 | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 5.0 U D1 | µg/L |
| 1,2-Dibromo-3-chloropropane | 1.0 U | 5.0 U D1 | µg/L |
| 1,2,4-Trichlorobenzene | 1.0 U | 5.0 U D1 | µg/L |
| Hexachlorobutadiene | 1.0 U | 5.0 U D1 | µg/L |
| Naphthalene | 4.8 | 10 U D1 | µg/L |
| 1,2,3-Trichloropropane | 1.0 U | 5.0 U D1 | µg/L |
| Bromochloromethane | 1.0 U | 5.0 U D1 | µg/L |

Surrogate:

| | % RECOV | % RECOV | LIMITS |
|----------------------|----------|----------|--------|
| Dibromofluoromethane | 94 | 92 | 38-143 |
| D8-Toluene | 106 | 94 | 78-126 |
| Bromofluorobenzene | 103 | 94 | 72-132 |
| Date Analyzed | 05/01/00 | 05/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

D1 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

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RESULTS OF ANALYSIS

EPA METHOD 8270 -

SEMIVOLATILE ORGANICSMW-13STMW-1Units

| | | | |
|-----------------------------|------|------|------|
| Acenaphthene | 10 U | 10 U | µg/L |
| Acenaphthylene | 10 U | 10 U | µg/L |
| Anthracene | 10 U | 10 U | µg/L |
| Benzidine | 10 U | 10 U | µg/L |
| Benzo(a)anthracene | 10 U | 10 U | µg/L |
| Benzo(b)fluoranthene | 10 U | 10 U | µg/L |
| Benzo(k)fluoranthene | 10 U | 10 U | µg/L |
| Benzo(g,h,i)perylene | 10 U | 10 U | µg/L |
| Benzo(a)pyrene | 10 U | 10 U | µg/L |
| Benzylbutyl phthalate | 10 U | 10 U | µg/L |
| Bis(2-chloroethoxy)methane | 10 U | 10 U | µg/L |
| Bis(2-chloroethyl)ether | 10 U | 10 U | µg/L |
| Bis(2-chloroisopropyl)ether | 10 U | 10 U | µg/L |
| Bis(2-ethylhexyl)phthalate | 10 U | 10 U | µg/L |
| 4-Bromophenylphenyl ether | 10 U | 10 U | µg/L |
| 2-Chloronaphthalene | 10 U | 10 U | µg/L |
| 4-Chlorophenyl phenyl ether | 10 U | 10 U | µg/L |
| Chrysene | 10 U | 10 U | µg/L |
| Dibenzo(a,h)anthracene | 10 U | 10 U | µg/L |
| 1,2-Dichlorobenzene | 10 U | 10 U | µg/L |
| 1,3-Dichlorobenzene | 10 U | 10 U | µg/L |
| 1,4-Dichlorobenzene | 10 U | 10 U | µg/L |
| 3,3'-Dichlorobenzidine | 20 U | 20 U | µg/L |
| Diethyl phthalate | 10 U | 10 U | µg/L |
| Dimethyl phthalate | 10 U | 10 U | µg/L |
| Di-n-butyl phthalate | 10 U | 10 U | µg/L |
| Di-n-octyl phthalate | 10 U | 10 U | µg/L |
| 2,4-Dinitrotoluene | 10 U | 10 U | µg/L |
| 2,6-Dinitrotoluene | 10 U | 10 U | µg/L |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8270 (cont.) -
SEMIVOLATILE ORGANICS

| | <u>MW-13S</u> | <u>TMW-1</u> | <u>Units</u> |
|---------------------------|---------------|--------------|--------------|
| Fluoranthene | 10 U | 10 U | µg/L |
| Fluorene | 10 U | 10 U | µg/L |
| Hexachlorobenzene | 10 U | 10 U | µg/L |
| Hexachlorobutadiene | 10 U | 10 U | µg/L |
| Hexachlorocyclopentadiene | 10 U | 10 U | µg/L |
| Hexachloroethane | 10 U | 10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 10 U | 10 U | µg/L |
| Isophorone | 10 U | 10 U | µg/L |
| 1-Methylnaphthalene | 10 U | 10 U | µg/L |
| 2-Methylnaphthalene | 10 U | 10 U | µg/L |
| Naphthalene | 10 U | 10 U | µg/L |
| Nitrobenzene | 10 U | 10 U | µg/L |
| N-Nitrosodimethylamine | 10 U | 10 U | µg/L |
| N-Nitrosodi-n-propylamine | 10 U | 10 U | µg/L |
| N-Nitrosodiphenylamine | 10 U | 10 U | µg/L |
| Phenanthrene | 10 U | 10 U | µg/L |
| Pyrene | 10 U | 10 U | µg/L |
| 1,2,4-Trichlorobenzene | 10 U | 10 U | µg/L |
| Benzyl Alcohol | 10 U | 10 U | µg/L |
| Benzoic Acid | 10 U | 10 U | µg/L |
| 4-Chloroaniline | 10 U | 10 U | µg/L |
| 2-Nitroaniline | 10 U | 10 U | µg/L |
| 3-Nitroaniline | 10 U | 10 U | µg/L |
| 4-Nitroaniline | 10 U | 10 U | µg/L |
| Dibenzofuran | 10 U | 10 U | µg/L |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8270 (cont.) -
SEMIVOLATILE ORGANICS

| | MW-13S | TMW-1 | Units |
|----------------------------|--------|-------|-------|
| Pyridine | 10 U | 10 U | µg/L |
| 4-Chloro-3-methylphenol | 10 U | 10 U | µg/L |
| 2-Chlorophenol | 10 U | 10 U | µg/L |
| 2,4-Dichlorophenol | 10 U | 10 U | µg/L |
| 2,4-Dimethylphenol | 10 U | 10 U | µg/L |
| 2,4-Dinitrophenol | 50 U | 50 U | µg/L |
| 2-Methyl-4,6-dinitrophenol | 30 U | 30 U | µg/L |
| 2-Nitrophenol | 10 U | 10 U | µg/L |
| 4-Nitrophenol | 10 U | 10 U | µg/L |
| Pentachlorophenol | 10 U | 10 U | µg/L |
| Phenol | 10 U | 10 U | µg/L |
| 2,4,6-Trichlorophenol | 10 U | 10 U | µg/L |
| 2-Methylphenol | 10 U | 10 U | µg/L |
| 3 & 4-Methylphenol | 10 U | 10 U | µg/L |
| 2,4,5-Trichlorophenol | 10 U | 10 U | µg/L |

| Surrogate: | % RECOV | % RECOV | LIMITS |
|----------------------|----------|----------|--------|
| Nitrobenzene -D5 | 47 | 49 | 30-106 |
| 2-Fluorobiphenyl | 60 | 62 | 38-107 |
| Terphenyl -D14 | 97 | 100 | 29-131 |
| Phenol -D5 | 36 | 38 | 12-87 |
| 2-Fluorophenol | 45 | 47 | 19-115 |
| 2,4,6-Tribromophenol | 78 | 86 | 35-126 |
| Date Extracted | 04/28/00 | 04/28/00 | |
| Date Analyzed | 04/28/00 | 04/28/00 | |

U = Compound was analyzed for but not detected to the level shown.

I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>MW-13S</u> | <u>TMW-1</u> | <u>Units</u> |
|---------------------|---------------|---------------|--------------|--------------|
| Arsenic | 200.7 | 0.011 I | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Barium | 200.7 | 0.10 U | 0.10 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Cadmium | 200.7 | 0.0020 I | 0.0010 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Chromium | 200.7 | 0.031 | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Lead | 200.7 | 0.0090 I | 0.074 | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Mercury | 245.1 | 0.00020 U | 0.00020 U | mg/L |
| Date Analyzed | | 04/27/00 | 04/27/00 | |
| Selenium | 200.7 | 0.010 U | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Silver | 200.7 | 0.010 U | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |

EPA METHOD FLPRO -

PETROL. RESIDUAL ORG.

| | <u>MW-13S</u> | <u>TMW-1</u> | <u>Units</u> |
|-----------------------|----------------|----------------|---------------|
| Hydrocarbons (C8-C40) | 0.20 U | 0.20 U | mg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 70 | 83 | 65-140 |
| Date Extracted | 05/01/00 | 05/01/00 | |
| Date Analyzed | 05/01/00 | 05/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | <u>TMW-2</u> | <u>TMW-3</u> | <u>Units</u> |
|-------------------------|--------------|--------------|--------------|
| Dichlorodifluoromethane | 2.0 U | 2.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 2.0 U | 2.0 U | µg/L |
| Chloroethane | 2.0 U | 2.0 U | µg/L |
| Trichlorofluoromethane | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Acetone | 50 U | 50 U | µg/L |
| Carbon Disulfide | 50 U | 50 U | µg/L |
| Methylene Chloride | 5.0 U | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methyl tert-butyl ether | 28 | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| 2,2-Dichloropropane | 2.0 U | 2.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 2-Butanone | 20 U | 20 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Dibromomethane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| | TMW-2 | TMW-3 | Units |
|---------------------------|-------|-------|-------|
| 2-Chloroethyl vinyl ether | 6.0 U | 6.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 4-Methyl-2-pentanone | 20 U | 20 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 3.0 U | 3.0 U | µg/L |
| 1,3-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| 2-Hexanone | 20 U | 20 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| 1,2-Dibromoethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,1,1,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 2.0 U | 2.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| Styrene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| Isopropylbenzene | 13 | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| Bromobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2,3-Trichlorobenzene | 1.0 U | 1.0 U | µg/L |
| n-Propylbenzene | 25 | 1.0 U | µg/L |
| 2-Chlorotoluene | 1.0 U | 1.0 U | µg/L |
| 1,3,5-Trimethylbenzene | 1.0 U | 1.0 U | µg/L |
| 4-Chlorotoluene | 1.0 U | 1.0 U | µg/L |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| | TMW-2 | TMW-3 | Units |
|-----------------------------|-------|-------|-------|
| tert-Butylbenzene | 2.6 | 1.0 U | µg/L |
| 1,2,4-Trimethylbenzene | 1.0 U | 1.0 U | µg/L |
| s-Butylbenzene | 15 | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| p-Isopropyltoluene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| n-Butylbenzene | 10 | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dibromo-3-chloropropane | 1.0 U | 1.0 U | µg/L |
| 1,2,4-Trichlorobenzene | 1.0 U | 1.0 U | µg/L |
| Hexachlorobutadiene | 1.0 U | 1.0 U | µg/L |
| Naphthalene | 120 | 8.5 | µg/L |
| 1,2,3-Trichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromochloromethane | 1.0 U | 1.0 U | µg/L |

Surrogate:

| | % RECOV | % RECOV | LIMITS |
|----------------------|----------|----------|--------|
| Dibromofluoromethane | 94 | 88 | 38-143 |
| D8-Toluene | 104 | 99 | 78-126 |
| Bromofluorobenzene | 102 | 92 | 72-132 |
| Date Analyzed | 05/01/00 | 05/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8270 -
SEMIVOLATILE ORGANICSTMW-2TMW-3Units

| | | | |
|-----------------------------|------|------|------|
| Acenaphthene | 10 U | 10 U | µg/L |
| Acenaphthylene | 10 U | 10 U | µg/L |
| Anthracene | 10 U | 10 U | µg/L |
| Benzidine | 10 U | 10 U | µg/L |
| Benzo(a)anthracene | 10 U | 10 U | µg/L |
| Benzo(b)fluoranthene | 10 U | 10 U | µg/L |
| Benzo(k)fluoranthene | 10 U | 10 U | µg/L |
| Benzo(g,h,i)perylene | 10 U | 10 U | µg/L |
| Benzo(a)pyrene | 10 U | 10 U | µg/L |
| Benzylbutyl phthalate | 10 U | 10 U | µg/L |
| Bis(2-chloroethoxy)methane | 10 U | 10 U | µg/L |
| Bis(2-chloroethyl)ether | 10 U | 10 U | µg/L |
| Bis(2-chloroisopropyl)ether | 10 U | 10 U | µg/L |
| Bis(2-ethylhexyl)phthalate | 10 U | 10 U | µg/L |
| 4-Bromophenylphenyl ether | 10 U | 10 U | µg/L |
| 2-Chloronaphthalene | 10 U | 10 U | µg/L |
| 4-Chlorophenyl phenyl ether | 10 U | 10 U | µg/L |
| Chrysene | 10 U | 10 U | µg/L |
| Dibenzo(a,h)anthracene | 10 U | 10 U | µg/L |
| 1,2-Dichlorobenzene | 10 U | 10 U | µg/L |
| 1,3-Dichlorobenzene | 10 U | 10 U | µg/L |
| 1,4-Dichlorobenzene | 10 U | 10 U | µg/L |
| 3,3'-Dichlorobenzidine | 20 U | 20 U | µg/L |
| Diethyl phthalate | 10 U | 10 U | µg/L |
| Dimethyl phthalate | 10 U | 10 U | µg/L |
| Di-n-butyl phthalate | 10 U | 10 U | µg/L |
| Di-n-octyl phthalate | 10 U | 10 U | µg/L |
| 2,4-Dinitrotoluene | 10 U | 10 U | µg/L |
| 2,6-Dinitrotoluene | 10 U | 10 U | µg/L |

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RESULTS OF ANALYSIS

EPA METHOD 8270 (cont.) -
SEMIVOLATILE ORGANICS

| | TMW-2 | TMW-3 | Units |
|---------------------------|-------|-------|-------|
| Fluoranthene | 10 U | 10 U | µg/L |
| Fluorene | 10 U | 10 U | µg/L |
| Hexachlorobenzene | 10 U | 10 U | µg/L |
| Hexachlorobutadiene | 10 U | 10 U | µg/L |
| Hexachlorocyclopentadiene | 10 U | 10 U | µg/L |
| Hexachloroethane | 10 U | 10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 10 U | 10 U | µg/L |
| Isophorone | 10 U | 10 U | µg/L |
| 1-Methylnaphthalene | 46 | 10 U | µg/L |
| 2-Methylnaphthalene | 45 | 10 U | µg/L |
| Naphthalene | 42 | 10 U | µg/L |
| Nitrobenzene | 10 U | 10 U | µg/L |
| N-Nitrosodimethylamine | 10 U | 10 U | µg/L |
| N-Nitrosodi-n-propylamine | 10 U | 10 U | µg/L |
| N-Nitrosodiphenylamine | 10 U | 10 U | µg/L |
| Phenanthrene | 10 U | 10 U | µg/L |
| Pyrene | 10 U | 10 U | µg/L |
| 1,2,4-Trichlorobenzene | 10 U | 10 U | µg/L |
| Benzyl Alcohol | 10 U | 10 U | µg/L |
| Benzoic Acid | 10 U | 10 U | µg/L |
| 4-Chloroaniline | 10 U | 10 U | µg/L |
| 2-Nitroaniline | 10 U | 10 U | µg/L |
| 3-Nitroaniline | 10 U | 10 U | µg/L |
| 4-Nitroaniline | 10 U | 10 U | µg/L |
| Dibenzofuran | 10 U | 10 U | µg/L |

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EPA METHOD 8270 (cont.) -
SEMIVOLATILE ORGANICS

| | TMW-2 | TMW-3 | Units |
|----------------------------|----------------|----------------|---------------|
| Pyridine | 10 U | 10 U | µg/L |
| 4-Chloro-3-methylphenol | 10 U | 10 U | µg/L |
| 2-Chlorophenol | 10 U | 10 U | µg/L |
| 2,4-Dichlorophenol | 10 U | 10 U | µg/L |
| 2,4-Dimethylphenol | 10 U | 10 U | µg/L |
| 2,4-Dinitrophenol | 50 U | 50 U | µg/L |
| 2-Methyl-4,6-dinitrophenol | 30 U | 30 U | µg/L |
| 2-Nitrophenol | 10 U | 10 U | µg/L |
| 4-Nitrophenol | 10 U | 10 U | µg/L |
| Pentachlorophenol | 10 U | 10 U | µg/L |
| Phenol | 10 U | 10 U | µg/L |
| 2,4,6-Trichlorophenol | 10 U | 10 U | µg/L |
| 2-Methylphenol | 10 U | 10 U | µg/L |
| 3 & 4-Methylphenol | 10 U | 10 U | µg/L |
| 2,4,5-Trichlorophenol | 10 U | 10 U | µg/L |
| Surrogate: | % RECOV | % RECOV | LIMITS |
| Nitrobenzene -D5 | 36 | 46 | 30-106 |
| 2-Fluorobiphenyl | 50 | 57 | 38-107 |
| Terphenyl -D14 | 80 | 92 | 29-131 |
| Phenol -D5 | 27 | 34 | 12-87 |
| 2-Fluorophenol | 32 | 45 | 19-115 |
| 2,4,6-Tribromophenol | 89 | 80 | 35-126 |
| Date Extracted | 04/28/00 | 04/28/00 | |
| Date Analyzed | 04/28/00 | 04/29/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-2</u> | <u>TMW-3</u> | <u>Units</u> |
|------------------------------|---------------|----------------|----------------|---------------|
| Arsenic | 200.7 | 0.010 U | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Barium | 200.7 | 0.10 U | 0.10 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Cadmium | 200.7 | 0.0010 U | 0.0010 I | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Chromium | 200.7 | 0.010 U | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Mercury | 245.1 | 0.00020 U | 0.00020 U | mg/L |
| Date Analyzed | | 04/27/00 | 04/27/00 | |
| Selenium | 200.7 | 0.010 U | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Silver | 200.7 | 0.010 U | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| <u>EPA METHOD FLPRO -</u> | | | | |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| | | <u>TMW-2</u> | <u>TMW-3</u> | <u>Units</u> |
| Hydrocarbons (C8-C40) | | 3.2 | 0.20 U | mg/L |
| <u>Surrogate:</u> | | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | | 108 | 90 | 65-140 |
| Date Extracted | | 05/01/00 | 05/01/00 | |
| Date Analyzed | | 05/02/00 | 05/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | CS-1 | CS-2 | Units |
|-------------------------|----------|----------|-------|
| Dichlorodifluoromethane | 3.3 U D2 | 2.9 U D3 | µg/Kg |
| Chloromethane | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Vinyl Chloride | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Bromomethane | 1.0 U D2 | 1.0 U D3 | µg/Kg |
| Chloroethane | 1.0 U D2 | 1.0 U D3 | µg/Kg |
| Trichlorofluoromethane | 1.0 U D2 | 1.0 U D3 | µg/Kg |
| 1,1-Dichloroethene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Acetone | 32 U D2 | 29 U D3 | µg/Kg |
| Carbon Disulfide | 32 U D2 | 29 U D3 | µg/Kg |
| Methylene Chloride | 8.0 U D2 | 7.0 U D3 | µg/Kg |
| t-1,2-Dichloroethene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Methyl tert-butyl ether | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,1-Dichloroethane | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 2,2-Dichloropropane | 4.0 U D2 | 3.0 U D3 | µg/Kg |
| c-1,2-Dichloroethene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 2-Butanone | 33 U D2 | 29 U D3 | µg/Kg |
| Chloroform | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,1,1-Trichloroethane | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Carbon tetrachloride | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,1-Dichloropropene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Benzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,2-Dichloroethane | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Trichloroethene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,2-Dichloropropane | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Dibromomethane | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Bromodichloromethane | 1.6 U D2 | 1.5 U D3 | µg/Kg |

U = Compound was analyzed for but not detected to the level shown.

D2 = Analyte value determined from a 1:1.33 dilution.

D3 = Analyte value determined from a 1:1.35 dilution.

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| | CS-1 | CS-2 | Units |
|---------------------------|----------|----------|-------|
| 2-Chloroethyl vinyl ether | 10 U D2 | 8.0 U D3 | µg/Kg |
| c-1,3-Dichloropropene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 4-Methyl-2-pentanone | 32 U D2 | 29 U D3 | µg/Kg |
| Toluene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| t-1,3-Dichloropropene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,1,2-Trichloroethane | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Tetrachloroethene | 5.0 U D2 | 4.0 U D3 | µg/Kg |
| 1,3-Dichloropropane | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 2-Hexanone | 32 U D2 | 29 U D3 | µg/Kg |
| Dibromochloromethane | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,2-Dibromoethane | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Chlorobenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,1,1,2-Tetrachloroethane | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Ethylbenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| m-Xylene & p-Xylene | 3.3 U D2 | 2.9 U D3 | µg/Kg |
| o-Xylene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Styrene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Bromoform | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Isopropylbenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,1,2,2-Tetrachloroethane | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Bromobenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,2,3-Trichlorobenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| n-Propylbenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 2-Chlorotoluene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,3,5-Trimethylbenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 4-Chlorotoluene | 1.6 U D2 | 1.5 U D3 | µg/Kg |

U = Compound was analyzed for but not detected to the level shown.

D2 = Analyte value determined from a 1:1.33 dilution.

D3 = Analyte value determined from a 1:1.35 dilution.

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| | CS-1 | CS-2 | Units |
|-----------------------------|----------|----------|-------|
| tert-Butylbenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,2,4-Trimethylbenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| s-Butylbenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,3-Dichlorobenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| p-Isopropyltoluene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,4-Dichlorobenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| n-Butylbenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,2-Dichlorobenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,2-Dibromo-3-chloropropane | 1.0 U D2 | 1.0 U D3 | µg/Kg |
| 1,2,4-Trichlorobenzene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Hexachlorobutadiene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Naphthalene | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| 1,2,3-Trichloropropane | 1.6 U D2 | 1.5 U D3 | µg/Kg |
| Bromochloromethane | 1.6 U D2 | 1.5 U D3 | µg/Kg |

Surrogate:

| | % RECOV | % RECOV | LIMITS |
|----------------------|----------|----------|--------|
| Dibromofluoromethane | 89 | 88 | 59-143 |
| D8-Toluene | 100 | 93 | 60-115 |
| Bromofluorobenzene | 99 | 97 | 55-144 |
| Date Analyzed | 04/30/00 | 04/30/00 | |

U = Compound was analyzed for but not detected to the level shown.

D2 = Analyte value determined from a 1:1.33 dilution.

D3 = Analyte value determined from a 1:1.35 dilution.

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RESULTS OF ANALYSIS

EPA METHOD 8270 -

SEMIVOLATILE ORGANICS

CS-1

CS-2

Units

| | | | |
|-----------------------------|-------|-------|-------|
| Acenaphthene | 400 U | 350 U | µg/Kg |
| Acenaphthylene | 400 U | 350 U | µg/Kg |
| Anthracene | 400 U | 350 U | µg/Kg |
| Benzidine | 400 U | 350 U | µg/Kg |
| Benzo(a)anthracene | 400 U | 350 U | µg/Kg |
| Benzo(b)fluoranthene | 400 U | 350 U | µg/Kg |
| Benzo(k)fluoranthene | 400 U | 350 U | µg/Kg |
| Benzo(g,h,i)perylene | 400 U | 350 U | µg/Kg |
| Benzo(a)pyrene | 400 U | 350 U | µg/Kg |
| Benzylbutyl phthalate | 400 U | 350 U | µg/Kg |
| Bis(2-chloroethoxy)methane | 400 U | 350 U | µg/Kg |
| Bis(2-chloroethyl)ether | 400 U | 350 U | µg/Kg |
| Bis(2-chloroisopropyl)ether | 400 U | 350 U | µg/Kg |
| Bis(2-ethylhexyl)phthalate | 400 U | 350 U | µg/Kg |
| 4-Bromophenylphenyl ether | 400 U | 350 U | µg/Kg |
| 2-Chloronaphthalene | 400 U | 350 U | µg/Kg |
| 4-Chlorophenyl phenyl ether | 400 U | 350 U | µg/Kg |
| Chrysene | 400 U | 350 U | µg/Kg |
| Dibenzo(a,h)anthracene | 400 U | 350 U | µg/Kg |
| 1,2-Dichlorobenzene | 400 U | 350 U | µg/Kg |
| 1,3-Dichlorobenzene | 400 U | 350 U | µg/Kg |
| 1,4-Dichlorobenzene | 400 U | 350 U | µg/Kg |
| 3,3'-Dichlorobenzidine | 800 U | 700 U | µg/Kg |
| Diethyl phthalate | 400 U | 350 U | µg/Kg |
| Dimethyl phthalate | 400 U | 350 U | µg/Kg |
| Di-n-butyl phthalate | 400 U | 350 U | µg/Kg |
| Di-n-octyl phthalate | 400 U | 350 U | µg/Kg |
| 2,4-Dinitrotoluene | 400 U | 350 U | µg/Kg |
| 2,6-Dinitrotoluene | 400 U | 350 U | µg/Kg |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8270 (cont.) -
SEMIVOLATILE ORGANICS

| | <u>CS-1</u> | <u>CS-2</u> | <u>Units</u> |
|---------------------------|-------------|-------------|--------------|
| Fluoranthene | 400 U | 350 U | µg/Kg |
| Fluorene | 400 U | 350 U | µg/Kg |
| Hexachlorobenzene | 400 U | 350 U | µg/Kg |
| Hexachlorobutadiene | 400 U | 350 U | µg/Kg |
| Hexachlorocyclopentadiene | 400 U | 350 U | µg/Kg |
| Hexachloroethane | 400 U | 350 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 400 U | 350 U | µg/Kg |
| Isophorone | 400 U | 350 U | µg/Kg |
| 1-Methylnaphthalene | 400 U | 350 U | µg/Kg |
| 2-Methylnaphthalene | 400 U | 350 U | µg/Kg |
| Naphthalene | 400 U | 350 U | µg/Kg |
| Nitrobenzene | 400 U | 350 U | µg/Kg |
| N-Nitrosodimethylamine | 400 U | 350 U | µg/Kg |
| N-Nitrosodi-n-propylamine | 400 U | 350 U | µg/Kg |
| N-Nitrosodiphenylamine | 400 U | 350 U | µg/Kg |
| Phenanthrene | 400 U | 350 U | µg/Kg |
| Pyrene | 400 U | 350 U | µg/Kg |
| 1,2,4-Trichlorobenzene | 400 U | 350 U | µg/Kg |
| Benzyl Alcohol | 400 U | 350 U | µg/Kg |
| Benzoic Acid | 400 U | 350 U | µg/Kg |
| 4-Chloroaniline | 400 U | 350 U | µg/Kg |
| 2-Nitroaniline | 400 U | 350 U | µg/Kg |
| 3-Nitroaniline | 400 U | 350 U | µg/Kg |
| 4-Nitroaniline | 400 U | 350 U | µg/Kg |
| Dibenzofuran | 400 U | 350 U | µg/Kg |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8270 (cont.) -
SEMIVOLATILE ORGANICS

| | CS-1 | CS-2 | Units |
|----------------------------|--------|--------|-------|
| Pyridine | 400 U | 350 U | µg/Kg |
| 4-Chloro-3-methylphenol | 400 U | 350 U | µg/Kg |
| 2-Chlorophenol | 400 U | 350 U | µg/Kg |
| 2,4-Dichlorophenol | 400 U | 350 U | µg/Kg |
| 2,4-Dimethylphenol | 400 U | 350 U | µg/Kg |
| 2,4-Dinitrophenol | 2000 U | 1800 U | µg/Kg |
| 2-Methyl-4,6-dinitrophenol | 1200 U | 1000 U | µg/Kg |
| 2-Nitrophenol | 400 U | 350 U | µg/Kg |
| 4-Nitrophenol | 400 U | 350 U | µg/Kg |
| Pentachlorophenol | 400 U | 350 U | µg/Kg |
| Phenol | 400 U | 350 U | µg/Kg |
| 2,4,6-Trichlorophenol | 400 U | 350 U | µg/Kg |
| 2-Methylphenol | 400 U | 350 U | µg/Kg |
| 3 & 4-Methylphenol | 400 U | 350 U | µg/Kg |
| 2,4,5-Trichlorophenol | 400 U | 350 U | µg/Kg |

Surrogate:

| | % RECOV | % RECOV | LIMITS |
|----------------------|----------|----------|--------|
| Nitrobenzene -D5 | 64 | 66 | 35-112 |
| 2-Fluorobiphenyl | 72 | 80 | 42-111 |
| Terphenyl -D14 | 97 | 106 | 40-124 |
| Phenol -D5 | 69 | 81 | 20-120 |
| 2-Fluorophenol | 68 | 81 | 29-130 |
| 2,4,6-Tribromophenol | 66 | 71 | 35-126 |
| Date Extracted | 04/27/00 | 04/27/00 | |
| Date Analyzed | 04/27/00 | 04/27/00 | |

MISCELLANEOUS

| | METHOD | CS-1 | CS-2 | Units |
|----------------|---------|----------|----------|-------|
| Percent Solids | SM2540G | 82 | 94 | % |
| Date Analyzed | | 04/28/00 | 04/28/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>CS-1</u> | <u>CS-2</u> | <u>Units</u> |
|------------------------------|---------------|----------------|----------------|---------------|
| Arsenic | 6010 | 1.0 I | 1.5 I | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Barium | 6010 | 24 U | 21 U | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Cadmium | 6010 | 1.0 U | 1.0 U | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Chromium | 6010 | 1.0 | 1.0 U | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Lead | 6010 | 4.4 | 1.0 U | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Mercury | 7471 | 0.010 U | 0.010 U | mg/Kg |
| Date Analyzed | | 04/28/00 | 04/28/00 | |
| Selenium | 6010 | 2.0 U | 2.0 U | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Silver | 6010 | 2.0 U | 2.0 U | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| <u>EPA METHOD FLPRO -</u> | | | | |
| <u>PETROL. RESIDUAL ORG.</u> | | <u>CS-1</u> | <u>CS-2</u> | <u>Units</u> |
| Hydrocarbons (C8-C40) | | 8.0 U | 7.0 U | mg/Kg |
| <u>Surrogate:</u> | | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | | 62 | 68 | 51-148 |
| Date Extracted | | 04/28/00 | 04/28/00 | |
| Date Analyzed | | 04/28/00 | 04/28/00 | |

U = Compound was analyzed for but not detected to the level shown.

I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICSLAB BLANKUnits

| | | |
|-------------------------|-------|------|
| Dichlorodifluoromethane | 2.0 U | µg/L |
| Chloromethane | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 2.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 1.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Acetone | 50 U | µg/L |
| Carbon Disulfide | 50 U | µg/L |
| Methylene Chloride | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| Methyl tert-butyl ether | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| 2,2-Dichloropropane | 2.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| 2-Butanone | 20 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon tetrachloride | 1.0 U | µg/L |
| 1,1-Dichloropropene | 1.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Dibromomethane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |

NR = Analysis not requested for this sample.

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| <u>LAB</u> | <u>BLANK</u> | <u>Units</u> |
|---------------------------|--------------|--------------|
| 2-Chloroethyl vinyl ether | 6.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| 4-Methyl-2-pentanone | 20 U | µg/L |
| Toluene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 3.0 U | µg/L |
| 1,3-Dichloropropane | 1.0 U | µg/L |
| 2-Hexanone | 20 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| 1,2-Dibromoethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| 1,1,1,2-Tetrachloroethane | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 2.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| Styrene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| Isopropylbenzene | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| Bromobenzene | 1.0 U | µg/L |
| 1,2,3-Trichlorobenzene | 1.0 U | µg/L |
| n-Propylbenzene | 1.0 U | µg/L |
| 2-Chlorotoluene | 1.0 U | µg/L |
| 1,3,5-Trimethylbenzene | 1.0 U | µg/L |
| 4-Chlorotoluene | 1.0 U | µg/L |

NR = Analysis not requested for this sample.

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| <u>LAB</u> | <u>BLANK</u> | <u>Units</u> |
|-----------------------------|--------------|--------------|
| tert-Butylbenzene | 1.0 U | µg/L |
| 1,2,4-Trimethylbenzene | 1.0 U | µg/L |
| s-Butylbenzene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| p-Isopropyltoluene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| n-Butylbenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dibromo-3-chloropropane | 1.0 U | µg/L |
| 1,2,4-Trichlorobenzene | 1.0 U | µg/L |
| Hexachlorobutadiene | 1.0 U | µg/L |
| Naphthalene | 2.0 U | µg/L |
| 1,2,3-Trichloropropane | 1.0 U | µg/L |
| Bromochloromethane | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------------|----------------|---------------|
| Dibromofluoromethane | 90 | 38-143 |
| D8-Toluene | 93 | 78-126 |
| Bromofluorobenzene | 100 | 72-132 |
| Date Analyzed | 04/29/00 | |

NR = Analysis not requested for this sample.

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | <u>CS-3</u> | | <u>LAB BLANK</u> | <u>Units</u> |
|-------------------------|-------------|------|------------------|--------------|
| Dichlorodifluoromethane | 4.7 | U D4 | 2.0 U | µg/Kg |
| Chloromethane | 2.4 | U D4 | 1.0 U | µg/Kg |
| Vinyl Chloride | 2.4 | U D4 | 1.0 U | µg/Kg |
| Bromomethane | 2.0 | U D4 | 1.0 U | µg/Kg |
| Chloroethane | 2.0 | U D4 | 1.0 U | µg/Kg |
| Trichlorofluoromethane | 2.0 | U D4 | 1.0 U | µg/Kg |
| 1,1-Dichloroethene | 2.4 | U D4 | 1.0 U | µg/Kg |
| Acetone | 47 | U D4 | 24 | µg/Kg |
| Carbon Disulfide | 47 | U D4 | 20 U | µg/Kg |
| Methylene Chloride | 11 | U D4 | 8.0 I | µg/Kg |
| t-1,2-Dichloroethene | 2.4 | U D4 | 1.0 U | µg/Kg |
| Methyl tert-butyl ether | 2.4 | U D4 | 1.0 U | µg/Kg |
| 1,1-Dichloroethane | 2.4 | U D4 | 1.0 U | µg/Kg |
| 2,2-Dichloropropane | 5.0 | U D4 | 2.0 U | µg/Kg |
| c-1,2-Dichloroethene | 2.4 | U D4 | 1.0 U | µg/Kg |
| 2-Butanone | 47 | U D4 | 20 U | µg/Kg |
| Chloroform | 2.4 | U D4 | 1.0 U | µg/Kg |
| 1,1,1-Trichloroethane | 2.4 | U D4 | 1.0 U | µg/Kg |
| Carbon tetrachloride | 2.4 | U D4 | 1.0 U | µg/Kg |
| 1,1-Dichloropropene | 2.4 | U D4 | 1.0 U | µg/Kg |
| Benzene | 2.4 | U D4 | 1.0 U | µg/Kg |
| 1,2-Dichloroethane | 2.4 | U D4 | 1.0 U | µg/Kg |
| Trichloroethene | 2.4 | U D4 | 1.0 U | µg/Kg |
| 1,2-Dichloropropane | 2.4 | U D4 | 1.0 U | µg/Kg |
| Dibromomethane | 2.4 | U D4 | 1.0 U | µg/Kg |
| Bromodichloromethane | 2.4 | U D4 | 1.0 U | µg/Kg |

U = Compound was analyzed for but not detected to the level shown.

I = Analyte detected; value is between the Method Detection Level (MDL)
and the Practical Quantitation Level (PQL).

D4 = Analyte value determined from a 1:2.29 dilution.

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| | CS-3 | LAB BLANK | Units |
|---------------------------|----------|-----------|-------|
| 2-Chloroethyl vinyl ether | 14 U D4 | 6.0 U | µg/Kg |
| c-1,3-Dichloropropene | 2.4 U D4 | 1.0 U | µg/Kg |
| 4-Methyl-2-pentanone | 47 U D4 | 20 U | µg/Kg |
| Toluene | 2.4 U D4 | 1.0 U | µg/Kg |
| t-1,3-Dichloropropene | 2.4 U D4 | 1.0 U | µg/Kg |
| 1,1,2-Trichloroethane | 2.4 U D4 | 1.0 U | µg/Kg |
| Tetrachloroethene | 7.0 U D4 | 3.0 U | µg/Kg |
| 1,3-Dichloropropane | 2.4 U D4 | 1.0 U | µg/Kg |
| 2-Hexanone | 47 U D4 | 20 U | µg/Kg |
| Dibromochloromethane | 2.4 U D4 | 1.0 U | µg/Kg |
| 1,2-Dibromoethane | 2.4 U D4 | 1.0 U | µg/Kg |
| Chlorobenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| 1,1,1,2-Tetrachloroethane | 2.4 U D4 | 1.0 U | µg/Kg |
| Ethylbenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| m-Xylene & p-Xylene | 4.7 U D4 | 2.0 U | µg/Kg |
| o-Xylene | 2.4 U D4 | 1.0 U | µg/Kg |
| Styrene | 2.4 U D4 | 1.0 U | µg/Kg |
| Bromoform | 2.4 U D4 | 1.0 U | µg/Kg |
| Isopropylbenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| 1,1,2,2-Tetrachloroethane | 2.4 U D4 | 1.0 U | µg/Kg |
| Bromobenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| 1,2,3-Trichlorobenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| n-Propylbenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| 2-Chlorotoluene | 2.4 U D4 | 1.0 U | µg/Kg |
| 1,3,5-Trimethylbenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| 4-Chlorotoluene | 2.4 U D4 | 1.0 U | µg/Kg |

U = Compound was analyzed for but not detected to the level shown.

D4 = Analyte value determined from a 1:2.29 dilution.

ENCO LABORATORIES

REPORT # : JAX10968

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| | CS-3 | LAB BLANK | Units |
|-----------------------------|----------|-----------|-------|
| tert-Butylbenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| 1,2,4-Trimethylbenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| s-Butylbenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| 1,3-Dichlorobenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| p-Isopropyltoluene | 2.4 U D4 | 1.0 U | µg/Kg |
| 1,4-Dichlorobenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| n-Butylbenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| 1,2-Dichlorobenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| 1,2-Dibromo-3-chloropropane | 2.0 U D4 | 1.0 U | µg/Kg |
| 1,2,4-Trichlorobenzene | 2.4 U D4 | 1.0 U | µg/Kg |
| Hexachlorobutadiene | 2.4 U D4 | 1.0 U | µg/Kg |
| Naphthalene | 2.4 U D4 | 1.0 U | µg/Kg |
| 1,2,3-Trichloropropane | 2.4 U D4 | 1.0 U | µg/Kg |
| Bromochloromethane | 2.4 U D4 | 1.0 U | µg/Kg |

Surrogate:

| | % RECOV | % RECOV | LIMITS |
|----------------------|----------|----------|--------|
| Dibromofluoromethane | 89 | 96 | 59-143 |
| D8-Toluene | 98 | 108 | 60-115 |
| Bromofluorobenzene | 100 | 108 | 55-144 |
| Date Analyzed | 04/30/00 | 04/28/00 | |

U = Compound was analyzed for but not detected to the level shown.

D4 = Analyte value determined from a 1:2.29 dilution.

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RESULTS OF ANALYSIS

EPA METHOD 8270 -

SEMIVOLATILE ORGANICSLAB BLANKUnits

| | | |
|------------------------------|------|------|
| Acenaphthene | 10 U | µg/L |
| Acenaphthylene | 10 U | µg/L |
| Anthracene | 10 U | µg/L |
| Benzidine | 10 U | µg/L |
| Benzo(a)anthracene | 10 U | µg/L |
| Benzo(b)fluoranthene | 10 U | µg/L |
| Benzo(k)fluoranthene | 10 U | µg/L |
| Benzo(g,h,i)perylene | 10 U | µg/L |
| Benzo(a)pyrene | 10 U | µg/L |
| Benzylbutyl phthalate | 10 U | µg/L |
| Bis(2-chloroethoxy)methane | 10 U | µg/L |
| Bis(2-chloroethyl) ether | 10 U | µg/L |
| Bis(2-chloroisopropyl) ether | 10 U | µg/L |
| Bis(2-ethylhexyl)phthalate | 10 U | µg/L |
| 4-Bromophenylphenyl ether | 10 U | µg/L |
| 2-Chloronaphthalene | 10 U | µg/L |
| 4-Chlorophenyl phenyl ether | 10 U | µg/L |
| Chrysene | 10 U | µg/L |
| Dibenzo(a,h)anthracene | 10 U | µg/L |
| 1,2-Dichlorobenzene | 10 U | µg/L |
| 1,3-Dichlorobenzene | 10 U | µg/L |
| 1,4-Dichlorobenzene | 10 U | µg/L |
| 3,3'-Dichlorobenzidine | 20 U | µg/L |
| Diethyl phthalate | 10 U | µg/L |
| Dimethyl phthalate | 10 U | µg/L |
| Di-n-butyl phthalate | 10 U | µg/L |
| Di-n-octyl phthalate | 10 U | µg/L |
| 2,4-Dinitrotoluene | 10 U | µg/L |
| 2,6-Dinitrotoluene | 10 U | µg/L |

NR = Analysis not requested for this sample.

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 8270 (cont.) -
SEMIVOLATILE ORGANICSLAB BLANKUnits

| | | |
|---------------------------|------|------|
| Fluoranthene | 10 U | µg/L |
| Fluorene | 10 U | µg/L |
| Hexachlorobenzene | 10 U | µg/L |
| Hexachlorobutadiene | 10 U | µg/L |
| Hexachlorocyclopentadiene | 10 U | µg/L |
| Hexachloroethane | 10 U | µg/L |
| Indeno (1,2,3-cd) pyrene | 10 U | µg/L |
| Isophorone | 10 U | µg/L |
| 1-Methylnaphthalene | 10 U | µg/L |
| 2-Methylnaphthalene | 10 U | µg/L |
| Naphthalene | 10 U | µg/L |
| Nitrobenzene | 10 U | µg/L |
| N-Nitrosodimethylamine | 10 U | µg/L |
| N-Nitrosodi-n-propylamine | 10 U | µg/L |
| N-Nitrosodiphenylamine | 10 U | µg/L |
| Phenanthrene | 10 U | µg/L |
| Pyrene | 10 U | µg/L |
| 1,2,4-Trichlorobenzene | 10 U | µg/L |
| Benzyl Alcohol | 10 U | µg/L |
| Benzoic Acid | 10 U | µg/L |
| 4-Chloroaniline | 10 U | µg/L |
| 2-Nitroaniline | 10 U | µg/L |
| 3-Nitroaniline | 10 U | µg/L |
| 4-Nitroaniline | 10 U | µg/L |
| Dibenzofuran | 10 U | µg/L |

NR = Analysis not requested for this sample.

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 8270 (cont.) -
SEMIVOLATILE ORGANICS

| LAB | BLANK | Units |
|-----|-------|-------|
| 10 | U | µg/L |
| 10 | U | µg/L |
| 10 | U | µg/L |
| 10 | U | µg/L |
| 10 | U | µg/L |
| 50 | U | µg/L |
| 30 | U | µg/L |
| 10 | U | µg/L |
| 10 | U | µg/L |
| 10 | U | µg/L |
| 10 | U | µg/L |
| 10 | U | µg/L |
| 10 | U | µg/L |
| 10 | U | µg/L |

Surrogate:

| | % RECOV | LIMITS |
|----------------------|----------|--------|
| Nitrobenzene -D5 | 70 | 30-106 |
| 2-Fluorobiphenyl | 72 | 38-107 |
| Terphenyl -D14 | #186 | 29-131 |
| Phenol -D5 | # 60 | 12-87 |
| 2-Fluorophenol | 76 | 19-115 |
| 2,4,6-Tribromophenol | 91 | 35-126 |
| Date Extracted | 04/28/00 | |
| Date Analyzed | 04/28/00 | |

= surrogate recovery outside of laboratory established limits.

NR= Analysis not requested for this sample.

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 8270 -
SEMIVOLATILE ORGANICSCS-3LAB BLANKUnits

| | | | |
|-----------------------------|-------|-------|-------|
| Acenaphthene | 340 U | 330 U | µg/Kg |
| Acenaphthylene | 340 U | 330 U | µg/Kg |
| Anthracene | 340 U | 330 U | µg/Kg |
| Benzidine | 340 U | 330 U | µg/Kg |
| Benzo(a)anthracene | 340 U | 330 U | µg/Kg |
| Benzo(b)fluoranthene | 340 U | 330 U | µg/Kg |
| Benzo(k)fluoranthene | 340 U | 330 U | µg/Kg |
| Benzo(g,h,i)perylene | 340 U | 330 U | µg/Kg |
| Benzo(a)pyrene | 340 U | 330 U | µg/Kg |
| Benzylbutyl phthalate | 340 U | 330 U | µg/Kg |
| Bis(2-chloroethoxy)methane | 340 U | 330 U | µg/Kg |
| Bis(2-chloroethyl)ether | 340 U | 330 U | µg/Kg |
| Bis(2-chloroisopropyl)ether | 340 U | 330 U | µg/Kg |
| Bis(2-ethylhexyl)phthalate | 340 U | 330 U | µg/Kg |
| 4-Bromophenylphenyl ether | 340 U | 330 U | µg/Kg |
| 2-Chloronaphthalene | 340 U | 330 U | µg/Kg |
| 4-Chlorophenyl phenyl ether | 340 U | 330 U | µg/Kg |
| Chrysene | 340 U | 330 U | µg/Kg |
| Dibenzo(a,h)anthracene | 340 U | 330 U | µg/Kg |
| 1,2-Dichlorobenzene | 340 U | 330 U | µg/Kg |
| 1,3-Dichlorobenzene | 340 U | 330 U | µg/Kg |
| 1,4-Dichlorobenzene | 340 U | 330 U | µg/Kg |
| 3,3'-Dichlorobenzidine | 680 U | 660 U | µg/Kg |
| Diethyl phthalate | 340 U | 330 U | µg/Kg |
| Dimethyl phthalate | 340 U | 330 U | µg/Kg |
| Di-n-butyl phthalate | 340 U | 330 U | µg/Kg |
| Di-n-octyl phthalate | 340 U | 330 U | µg/Kg |
| 2,4-Dinitrotoluene | 340 U | 330 U | µg/Kg |
| 2,6-Dinitrotoluene | 340 U | 330 U | µg/Kg |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8270 (cont.) -
SEMIVOLATILE ORGANICS

| | <u>CS-3</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------------|-------------|------------------|--------------|
| Fluoranthene | 340 U | 330 U | µg/Kg |
| Fluorene | 340 U | 330 U | µg/Kg |
| Hexachlorobenzene | 340 U | 330 U | µg/Kg |
| Hexachlorobutadiene | 340 U | 330 U | µg/Kg |
| Hexachlorocyclopentadiene | 340 U | 330 U | µg/Kg |
| Hexachloroethane | 340 U | 330 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 340 U | 330 U | µg/Kg |
| Isophorone | 340 U | 330 U | µg/Kg |
| 1-Methylnaphthalene | 340 U | 330 U | µg/Kg |
| 2-Methylnaphthalene | 340 U | 330 U | µg/Kg |
| Naphthalene | 340 U | 330 U | µg/Kg |
| Nitrobenzene | 340 U | 330 U | µg/Kg |
| N-Nitrosodimethylamine | 340 U | 330 U | µg/Kg |
| N-Nitrosodi-n-propylamine | 340 U | 330 U | µg/Kg |
| N-Nitrosodiphenylamine | 340 U | 330 U | µg/Kg |
| Phenanthrene | 340 U | 330 U | µg/Kg |
| Pyrene | 340 U | 330 U | µg/Kg |
| 1,2,4-Trichlorobenzene | 340 U | 330 U | µg/Kg |
| Benzyl Alcohol | 340 U | 330 U | µg/Kg |
| Benzoic Acid | 340 U | 330 U | µg/Kg |
| 4-Chloroaniline | 340 U | 330 U | µg/Kg |
| 2-Nitroaniline | 340 U | 330 U | µg/Kg |
| 3-Nitroaniline | 340 U | 330 U | µg/Kg |
| 4-Nitroaniline | 340 U | 330 U | µg/Kg |
| Dibenzofuran | 340 U | 330 U | µg/Kg |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8270 (cont.) -
SEMIVOLATILE ORGANICS

| | <u>CS-3</u> | <u>LAB BLANK</u> | <u>Units</u> |
|----------------------------|-------------|------------------|--------------|
| Pyridine | 340 U | 330 U | µg/Kg |
| 4-Chloro-3-methylphenol | 340 U | 330 U | µg/Kg |
| 2-Chlorophenol | 340 U | 330 U | µg/Kg |
| 2,4-Dichlorophenol | 340 U | 330 U | µg/Kg |
| 2,4-Dimethylphenol | 340 U | 330 U | µg/Kg |
| 2,4-Dinitrophenol | 1700 U | 1600 U | µg/Kg |
| 2-Methyl-4,6-dinitrophenol | 1000 U | 990 U | µg/Kg |
| 2-Nitrophenol | 340 U | 330 U | µg/Kg |
| 4-Nitrophenol | 340 U | 330 U | µg/Kg |
| Pentachlorophenol | 340 U | 330 U | µg/Kg |
| Phenol | 340 U | 330 U | µg/Kg |
| 2,4,6-Trichlorophenol | 340 U | 330 U | µg/Kg |
| 2-Methylphenol | 340 U | 330 U | µg/Kg |
| 3 & 4-Methylphenol | 340 U | 330 U | µg/Kg |
| 2,4,5-Trichlorophenol | 340 U | 330 U | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------------|----------------|----------------|---------------|
| Nitrobenzene -D5 | 70 | 74 | 35-112 |
| 2-Fluorobiphenyl | 73 | 90 | 42-111 |
| Terphenyl -D14 | 101 | 111 | 40-124 |
| Phenol -D5 | 86 | 90 | 20-120 |
| 2-Fluorophenol | 86 | 93 | 29-130 |
| 2,4,6-Tribromophenol | 65 | 70 | 35-126 |
| Date Extracted | 04/27/00 | 04/27/00 | |
| Date Analyzed | 04/28/00 | 04/27/00 | |

MISCELLANEOUSMETHODCS-3LAB BLANKUnits

| | | | | |
|----------------|---------|----------|----|---|
| Percent Solids | SM2540G | 97 | NR | % |
| Date Analyzed | | 04/28/00 | | |

NR = Analysis not requested for this sample.

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------|---------------|------------------|--------------|
| Arsenic | 200.7 | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | |
| Barium | 200.7 | 0.10 U | mg/L |
| Date Analyzed | | 04/26/00 | |
| Cadmium | 200.7 | 0.0010 U | mg/L |
| Date Analyzed | | 04/26/00 | |
| Chromium | 200.7 | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | |
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 04/26/00 | |

U = Compound was analyzed for but not detected to the level shown.

I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------|---------------|------------------|--------------|
| Mercury | 245.1 | 0.00020 U | mg/L |
| Date Analyzed | | 04/27/00 | |
| Selenium | 200.7 | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | |
| Silver | 200.7 | 0.010 U | mg/L |
| Date Analyzed | | 04/26/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---|------------------|---------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |
| Surrogate: | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 76 | 65-140 |
| Date Extracted | 05/01/00 | |
| Date Analyzed | 05/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>CS-3</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------|---------------|-------------|------------------|--------------|
| Arsenic | 6010 | 0.90 I | 0.50 U | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Barium | 6010 | 21 U | 20 U | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Cadmium | 6010 | 1.0 U | 1.0 U | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Lead | 6010 | 1.0 U | 1.0 U | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Mercury | 7471 | 0.010 U | 0.010 U | mg/Kg |
| Date Analyzed | | 04/28/00 | 04/28/00 | |
| Selenium | 6010 | 2.0 U | 2.0 U | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Silver | 6010 | 2.0 U | 2.0 U | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |
| Chromium | 6010 | 1.0 U | 1.0 U | mg/Kg |
| Date Analyzed | | 04/26/00 | 04/26/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>CS-3</u> | <u>LAB BLANK</u> | <u>Units</u> |
|-----------------------|----------------|------------------|---------------|
| Hydrocarbons (C8-C40) | 6.8 U | 6.6 U | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 57 | 90 | 51-148 |
| Date Extracted | 04/28/00 | 04/28/00 | |
| Date Analyzed | 04/28/00 | 04/28/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | <u>LAB</u> <u>BLANK</u> | <u>LAB</u> <u>BLANK</u> | <u>Units</u> |
|-------------------------|-------------------------|-------------------------|--------------|
| Dichlorodifluoromethane | 2.0 U | 2.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 2.0 U | 2.0 U | µg/L |
| Chloroethane | 2.0 U | 2.0 U | µg/L |
| Trichlorofluoromethane | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Acetone | 50 U | 50 U | µg/L |
| Carbon Disulfide | 50 U | 50 U | µg/L |
| Methylene Chloride | 5.0 U | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methyl tert-butyl ether | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| 2,2-Dichloropropane | 2.0 U | 2.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 2-Butanone | 20 U | 20 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Dibromomethane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| | LAB BLANK | LAB BLANK | Units |
|---------------------------|-----------|-----------|-------|
| 2-Chloroethyl vinyl ether | 6.0 U | 6.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 4-Methyl-2-pentanone | 20 U | 20 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 3.0 U | 3.0 U | µg/L |
| 1,3-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| 2-Hexanone | 20 U | 20 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| 1,2-Dibromoethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,1,1,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 2.0 U | 2.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| Styrene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| Isopropylbenzene | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| Bromobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2,3-Trichlorobenzene | 1.0 U | 1.0 U | µg/L |
| n-Propylbenzene | 1.0 U | 1.0 U | µg/L |
| 2-Chlorotoluene | 1.0 U | 1.0 U | µg/L |
| 1,3,5-Trimethylbenzene | 1.0 U | 1.0 U | µg/L |
| 4-Chlorotoluene | 1.0 U | 1.0 U | µg/L |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| | <u>LAB BLANK</u> | <u>LAB BLANK</u> | <u>Units</u> |
|-----------------------------|------------------|------------------|--------------|
| tert-Butylbenzene | 1.0 U | 1.0 U | µg/L |
| 1,2,4-Trimethylbenzene | 1.0 U | 1.0 U | µg/L |
| s-Butylbenzene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| p-Isopropyltoluene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| n-Butylbenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dibromo-3-chloropropane | 1.0 U | 1.0 U | µg/L |
| 1,2,4-Trichlorobenzene | 1.0 U | 1.0 U | µg/L |
| Hexachlorobutadiene | 1.0 U | 1.0 U | µg/L |
| Naphthalene | 2.0 U | 2.0 U | µg/L |
| 1,2,3-Trichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromochloromethane | 1.0 U | 1.0 U | µg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------------|----------------|----------------|---------------|
| Dibromofluoromethane | 92 | 92 | 38-143 |
| D8-Toluene | 100 | 100 | 78-126 |
| Bromofluorobenzene | 92 | 92 | 72-132 |
| Date Analyzed | 04/30/00 | 04/30/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | <u>LAB BLANK</u> | <u>Units</u> |
|-------------------------|------------------|--------------|
| Dichlorodifluoromethane | 2.0 U | µg/Kg |
| Chloromethane | 1.0 U | µg/Kg |
| Vinyl Chloride | 1.0 U | µg/Kg |
| Bromomethane | 1.0 U | µg/Kg |
| Chloroethane | 1.0 U | µg/Kg |
| Trichlorofluoromethane | 1.0 U | µg/Kg |
| 1,1-Dichloroethene | 1.0 U | µg/Kg |
| Acetone | 20 U | µg/Kg |
| Carbon Disulfide | 20 U | µg/Kg |
| Methylene Chloride | 5.0 U | µg/Kg |
| t-1,2-Dichloroethene | 1.0 U | µg/Kg |
| Methyl tert-butyl ether | 1.0 U | µg/Kg |
| 1,1-Dichloroethane | 1.0 U | µg/Kg |
| 2,2-Dichloropropane | 2.0 U | µg/Kg |
| c-1,2-Dichloroethene | 1.0 U | µg/Kg |
| 2-Butanone | 20 U | µg/Kg |
| Chloroform | 1.0 U | µg/Kg |
| 1,1,1-Trichloroethane | 1.0 U | µg/Kg |
| Carbon tetrachloride | 1.0 U | µg/Kg |
| 1,1-Dichloropropene | 1.0 U | µg/Kg |
| Benzene | 1.0 U | µg/Kg |
| 1,2-Dichloroethane | 1.0 U | µg/Kg |
| Trichloroethene | 1.0 U | µg/Kg |
| 1,2-Dichloropropane | 1.0 U | µg/Kg |
| Dibromomethane | 1.0 U | µg/Kg |
| Bromodichloromethane | 1.0 U | µg/Kg |

NR = Analysis not requested for this sample.

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ENCO LABORATORIES

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PROJECT NAME : Mayport Naval Station

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICSLAB BLANKUnits

| | | |
|---------------------------|-------|-------|
| 2-Chloroethyl vinyl ether | 6.0 U | µg/Kg |
| c-1,3-Dichloropropene | 1.0 U | µg/Kg |
| 4-Methyl-2-pentanone | 20 U | µg/Kg |
| Toluene | 1.0 U | µg/Kg |
| t-1,3-Dichloropropene | 1.0 U | µg/Kg |
| 1,1,2-Trichloroethane | 1.0 U | µg/Kg |
| Tetrachloroethene | 3.0 U | µg/Kg |
| 1,3-Dichloropropane | 1.0 U | µg/Kg |
| 2-Hexanone | 20 U | µg/Kg |
| Dibromochloromethane | 1.0 U | µg/Kg |
| 1,2-Dibromoethane | 1.0 U | µg/Kg |
| Chlorobenzene | 1.0 U | µg/Kg |
| 1,1,1,2-Tetrachloroethane | 1.0 U | µg/Kg |
| Ethylbenzene | 1.0 U | µg/Kg |
| m-Xylene & p-Xylene | 2.0 U | µg/Kg |
| o-Xylene | 1.0 U | µg/Kg |
| Styrene | 1.0 U | µg/Kg |
| Bromoform | 1.0 U | µg/Kg |
| Isopropylbenzene | 1.0 U | µg/Kg |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/Kg |
| Bromobenzene | 1.0 U | µg/Kg |
| 1,2,3-Trichlorobenzene | 1.0 U | µg/Kg |
| n-Propylbenzene | 1.0 U | µg/Kg |
| 2-Chlorotoluene | 1.0 U | µg/Kg |
| 1,3,5-Trimethylbenzene | 1.0 U | µg/Kg |
| 4-Chlorotoluene | 1.0 U | µg/Kg |

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

| <u>LAB BLANK</u> | <u>Units</u> |
|-----------------------------|------------------------|
| tert-Butylbenzene | 1.0 U $\mu\text{g/Kg}$ |
| 1,2,4-Trimethylbenzene | 1.0 U $\mu\text{g/Kg}$ |
| s-Butylbenzene | 1.0 U $\mu\text{g/Kg}$ |
| 1,3-Dichlorobenzene | 1.0 U $\mu\text{g/Kg}$ |
| p-Isopropyltoluene | 1.0 U $\mu\text{g/Kg}$ |
| 1,4-Dichlorobenzene | 1.0 U $\mu\text{g/Kg}$ |
| n-Butylbenzene | 1.0 U $\mu\text{g/Kg}$ |
| 1,2-Dichlorobenzene | 1.0 U $\mu\text{g/Kg}$ |
| 1,2-Dibromo-3-chloropropane | 1.0 U $\mu\text{g/Kg}$ |
| 1,2,4-Trichlorobenzene | 1.0 U $\mu\text{g/Kg}$ |
| Hexachlorobutadiene | 1.0 U $\mu\text{g/Kg}$ |
| Naphthalene | 1.0 U $\mu\text{g/Kg}$ |
| 1,2,3-Trichloropropane | 1.0 U $\mu\text{g/Kg}$ |
| Bromochloromethane | 1.0 U $\mu\text{g/Kg}$ |

Surrogate:

| <u>% RECOV</u> | <u>LIMITS</u> |
|----------------------|---------------|
| Dibromofluoromethane | 94 59-143 |
| D8-Toluene | 93 60-115 |
| Bromofluorobenzene | 94 55-144 |
| Date Analyzed | 04/30/00 |

NR = Analysis not requested for this sample.

U = Compound was analyzed for but not detected to the level shown.

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REPORT # : JAX10968

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICSLAB BLANKUnits

| | | |
|-------------------------|-------|------|
| Dichlorodifluoromethane | 2.0 U | µg/L |
| Chloromethane | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 2.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 1.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Acetone | 50 U | µg/L |
| Carbon Disulfide | 50 U | µg/L |
| Methylene Chloride | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| Methyl tert-butyl ether | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| 2,2-Dichloropropane | 2.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| 2-Butanone | 20 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon tetrachloride | 1.0 U | µg/L |
| 1,1-Dichloropropene | 1.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Dibromomethane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX10968

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PROJECT NAME : Mayport Naval Station

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICS

LAB BLANK

Units

| | | |
|---------------------------|-------|------|
| 2-Chloroethyl vinyl ether | 6.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| 4-Methyl-2-pentanone | 20 U | µg/L |
| Toluene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 3.0 U | µg/L |
| 1,3-Dichloropropane | 1.0 U | µg/L |
| 2-Hexanone | 20 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| 1,2-Dibromoethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| 1,1,1,2-Tetrachloroethane | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 2.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| Styrene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| Isopropylbenzene | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| Bromobenzene | 1.0 U | µg/L |
| 1,2,3-Trichlorobenzene | 1.0 U | µg/L |
| n-Propylbenzene | 1.0 U | µg/L |
| 2-Chlorotoluene | 1.0 U | µg/L |
| 1,3,5-Trimethylbenzene | 1.0 U | µg/L |
| 4-Chlorotoluene | 1.0 U | µg/L |

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ENCO LABORATORIES

REPORT # : JAX10968

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PROJECT NAME : Mayport Naval Station

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RESULTS OF ANALYSIS

EPA METHOD 8260 (cont.) -
VOLATILE ORGANICSLAB BLANKUnits

| | | |
|-----------------------------|-------|------|
| tert-Butylbenzene | 1.0 U | µg/L |
| 1,2,4-Trimethylbenzene | 1.0 U | µg/L |
| s-Butylbenzene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| p-Isopropyltoluene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| n-Butylbenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dibromo-3-chloropropane | 1.0 U | µg/L |
| 1,2,4-Trichlorobenzene | 1.0 U | µg/L |
| Hexachlorobutadiene | 1.0 U | µg/L |
| Naphthalene | 2.0 U | µg/L |
| 1,2,3-Trichloropropane | 1.0 U | µg/L |
| Bromochloromethane | 1.0 U | µg/L |

Surrogate:% RECOVLIMITS

| | | |
|----------------------|----------|--------|
| Dibromofluoromethane | 92 | 38-143 |
| D8-Toluene | 100 | 78-126 |
| Bromofluorobenzene | 92 | 72-132 |
| Date Analyzed | 04/30/00 | |

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 8260</u> | | | | |
| 1,1-Dichloroethene | 102/ 99/ 80 | 45-167 | 3 | 30 |
| Benzene | 96/102/ 93 | 60-130 | 6 | 23 |
| Trichloroethene | 101/102/ 97 | 50-122 | <1 | 10 |
| Toluene | 99/101/ 98 | 57-136 | 2 | 12 |
| Chlorobenzene | 104/101/ 99 | 59-126 | 3 | 11 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|---------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 8270</u> | | | | |
| Phenol | 50/ 50/ 59 | 29-102 | <1 | 44 |
| 2-Chlorophenol | 68/ 69/ 79 | 58-124 | 1 | 41 |
| 1,4-Dichlorobenzene | 47/ 47/ 50 | 0-127 | <1 | 43 |
| N-Nitrosodi-N-Propylamine | 55/ 53/ 64 | 72-118 | 4 | 22 |
| 1,2,4-Trichlorobenzene | 58/ 57/ 58 | 18-129 | 2 | 43 |
| 4-Chloro-3-methylphenol | 84/ 89/ 88 | 75-126 | 6 | 22 |
| Acenaphthene | 70/ 75/ 72 | 63-122 | 7 | 28 |
| 4-Nitrophenol | 26/ 30/ 28 | 0-168 | 14 | 52 |
| 2,4-Dinitrotoluene | 92/ 94/ 99 | 81-151 | 2 | 21 |
| Pentachlorophenol | 94/103/ 80 | 27-154 | 9 | 42 |
| Pyrene | 120/128/128 | 54-146 | 6 | 32 |

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|---------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 8270</u> | | | | |
| Phenol | 50/ 50/ 59 | 29-102 | <1 | 44 |
| 2-Chlorophenol | 68/ 69/ 79 | 58-124 | 1 | 41 |
| 1,4-Dichlorobenzene | 47/ 47/ 50 | D-127 | <1 | 43 |
| N-Nitrosodi-N-Propylamine | 55/ 53/ 64 | 72-118 | 4 | 22 |
| 1,2,4-Trichlorobenzene | 58/ 57/ 58 | 18-129 | 2 | 43 |
| 4-Chloro-3-Methylphenol | 84/ 89/ 88 | 75-126 | 6 | 22 |
| Acenaphthene | 70/ 75/ 72 | 63-122 | 7 | 28 |
| 4-Nitrophenol | 26/ 30/ 28 | D-168 | 14 | 52 |
| 2,4-Dinitrotoluene | 92/ 94/ 99 | 81-151 | 2 | 21 |
| Pentachlorophenol | 94/103/ 80 | 27-154 | 9 | 42 |
| Pyrene | 120/128/128 | 54-146 | 6 | 32 |

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|---------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 8270</u> | | | | |
| Phenol | 50/ 50/ 59 | 29-102 | <1 | 44 |
| 2-Chlorophenol | 68/ 69/ 79 | 58-124 | 1 | 41 |
| 1,4-Dichlorobenzene | 47/ 47/ 50 | 0-127 | <1 | 43 |
| N-Nitrosodi-N-Propylamine | 55/ 53/ 64 | 72-118 | 4 | 22 |
| 1,2,4-Trichlorobenzene | 58/ 57/ 58 | 18-129 | 2 | 43 |
| 4-Chloro-3-methylphenol | 84/ 89/ 88 | 75-126 | 6 | 22 |
| Acenaphthene | 70/ 75/ 72 | 63-122 | 7 | 28 |
| 4-Nitrophenol | 26/ 30/ 28 | 0-168 | 14 | 52 |
| 2,4-Dinitrotoluene | 92/ 94/ 99 | 81-151 | 2 | 21 |
| Pentachlorophenol | 94/103/ 80 | 27-154 | 9 | 42 |
| Pyrene | 120/128/128 | 54-146 | 6 | 32 |

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|---------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 8270</u> | | | | |
| Phenol | 50/ 50/ 59 | 29-102 | <1 | 44 |
| 2-Chlorophenol | 68/ 69/ 79 | 58-124 | 1 | 41 |
| 1,4-Dichlorobenzene | 47/ 47/ 50 | 0-127 | <1 | 43 |
| N-Nitrosodi-N-Propylamine | 55/ 53/ 64 | 72-118 | 4 | 22 |
| 1,2,4-Trichlorobenzene | 58/ 57/ 58 | 18-129 | 2 | 43 |
| 4-Chloro-3-Methylphenol | 84/ 89/ 88 | 75-126 | 6 | 22 |
| Acenaphthene | 70/ 75/ 72 | 63-122 | 7 | 28 |
| 4-Nitrophenol | 26/ 30/ 28 | 0-168 | 14 | 52 |
| 2,4-Dinitrotoluene | 92/ 94/ 99 | 81-151 | 2 | 21 |
| Pentachlorophenol | 94/103/ 80 | 27-154 | 9 | 42 |
| Pyrene | 120/128/128 | 54-146 | 6 | 32 |

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ENCO LABORATORIES

REPORT # : JAX10968

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|---------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| EPA Method 8270 | | | | |
| Phenol | 50/ 50/ 59 | 29-102 | <1 | 44 |
| 2-Chlorophenol | 68/ 69/ 79 | 58-124 | 1 | 41 |
| 1,4-Dichlorobenzene | 47/ 47/ 50 | 0-127 | <1 | 43 |
| N-Nitrosodi-N-Propylamine | 55/ 53/ 64 | 72-118 | 4 | 22 |
| 1,2,4-Trichlorobenzene | 58/ 57/ 58 | 18-129 | 2 | 43 |
| 4-Chloro-3-Methylphenol | 84/ 89/ 88 | 75-126 | 6 | 22 |
| Acenaphthene | 70/ 75/ 72 | 63-122 | 7 | 28 |
| 4-Nitrophenol | 26/ 30/ 28 | 0-168 | 14 | 52 |
| 2,4-Dinitrotoluene | 92/ 94/ 99 | 81-151 | 2 | 21 |
| Pentachlorophenol | 94/103/ 80 | 27-154 | 9 | 42 |
| Pyrene | 120/128/128 | 54-146 | 6 | 32 |

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|---------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 8270</u> | | | | |
| Phenol | 50/ 50/ 59 | 29-102 | <1 | 44 |
| 2-Chlorophenol | 68/ 69/ 79 | 58-124 | 1 | 41 |
| 1,4-Dichlorobenzene | 47/ 47/ 50 | 0-127 | <1 | 43 |
| N-Nitrosodi-N-Propylamine | 55/ 53/ 64 | 72-118 | 4 | 22 |
| 1,2,4-Trichlorobenzene | 58/ 57/ 58 | 18-129 | 2 | 43 |
| 4-Chloro-3-methylphenol | 84/ 89/ 88 | 75-126 | 6 | 22 |
| Acenaphthene | 70/ 75/ 72 | 63-122 | 7 | 28 |
| 4-Nitrophenol | 26/ 30/ 28 | 0-168 | 14 | 52 |
| 2,4-Dinitrotoluene | 92/ 94/ 99 | 81-151 | 2 | 21 |
| Pentachlorophenol | 94/103/ 80 | 27-154 | 9 | 42 |
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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|---------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 8270</u> | | | | |
| Phenol | 50/ 50/ 59 | 29-102 | <1 | 44 |
| 2-Chlorophenol | 68/ 69/ 79 | 58-124 | 1 | 41 |
| 1,4-Dichlorobenzene | 47/ 47/ 50 | 0-127 | <1 | 43 |
| N-Nitrosodi-N-Propylamine | 55/ 53/ 64 | 72-118 | 4 | 22 |
| 1,2,4-Trichlorobenzene | 58/ 57/ 58 | 18-129 | 2 | 43 |
| 4-Chloro-3-methylphenol | 84/ 89/ 88 | 75-126 | 6 | 22 |
| Acenaphthene | 70/ 75/ 72 | 63-122 | 7 | 28 |
| 4-Nitrophenol | 26/ 30/ 28 | 0-168 | 14 | 52 |
| 2,4-Dinitrotoluene | 92/ 94/ 99 | 81-151 | 2 | 21 |
| Pentachlorophenol | 94/103/ 80 | 27-154 | 9 | 42 |
| Pyrene | 120/128/128 | 54-146 | 6 | 32 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

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ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY MS/MSD/LCS</u> | <u>ACCEPT LIMITS</u> | <u>% RPD MS/MSD</u> | <u>ACCEPT LIMITS</u> |
|---------------------------|----------------------------------|--------------------------|-------------------------|--------------------------|
| <u>EPA Method 8270</u> | | | | |
| Phenol | 50/ 50/ 59 | 29-102 | <1 | 44 |
| 2-Chlorophenol | 68/ 69/ 79 | 58-124 | 1 | 41 |
| 1,4-Dichlorobenzene | 47/ 47/ 50 | 0-127 | <1 | 43 |
| N-Nitrosodi-N-Propylamine | 55/ 53/ 64 | 72-118 | 4 | 22 |
| 1,2,4-Trichlorobenzene | 58/ 57/ 58 | 18-129 | 2 | 43 |
| 4-Chloro-3-Methylphenol | 84/ 89/ 88 | 75-126 | 6 | 22 |
| Acenaphthene | 70/ 75/ 72 | 63-122 | 7 | 28 |
| 4-Nitrophenol | 26/ 30/ 28 | 0-168 | 14 | 52 |
| 2,4-Dinitrotoluene | 92/ 94/ 99 | 81-151 | 2 | 21 |
| Pentachlorophenol | 94/103/ 80 | 27-154 | 9 | 42 |
| Pyrene | 120/128/128 | 54-146 | 6 | 32 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY MS/MSD/LCS</u> | <u>ACCEPT LIMITS</u> | <u>% RPD MS/MSD</u> | <u>ACCEPT LIMITS</u> |
|---------------------------|----------------------------------|--------------------------|-------------------------|--------------------------|
| <u>EPA Method 8270</u> | | | | |
| Phenol | 89/ 79/ 88 | 48-111 | 12 | 38 |
| 2-Chlorophenol | 93/ 84/ 91 | 42-110 | 10 | 38 |
| 1,4-Dichlorobenzene | 75/ 67/ 79 | 42-110 | 11 | 33 |
| N-Nitrosodi-N-Propylamine | 65/ 56/ 65 | 41-118 | 15 | 29 |
| 1,2,4-Trichlorobenzene | 76/ 73/ 84 | 45-111 | 4 | 20 |
| 4-Chloro-3-methylphenol | 76/ 74/ 76 | 49-120 | 3 | 38 |
| Acenaphthene | 78/ 77/ 80 | 38-135 | 1 | 29 |
| 4-Nitrophenol | 34/ 31/ 32 | 44-169 | 9 | 68 |
| 2,4-Dinitrotoluene | 82/ 73/ 87 | 42-155 | 12 | 32 |
| Pentachlorophenol | 76/ 71/ 67 | 0-157 | 7 | 41 |
| Pyrene | 95/ 92/102 | 40-116 | 3 | 37 |
| <u>MISCELLANEOUS</u> | | | | |
| Percent Solids, SM2540G | NA/ NA/ NA | - | NA | |
| <u>TOTAL METALS</u> | | | | |
| Arsenic, 200.7 | 102/104/102 | 64-126 | 2 | 12 |
| Arsenic, 6010 | 95/ 92/100 | 53-153 | 3 | 22 |
| Barium, 200.7 | 97/ 98/ 99 | 74-119 | 1 | 11 |
| Barium, 6010 | 97/ 96/100 | 70-120 | 1 | 16 |
| Cadmium, 200.7 | 95/ 97/ 99 | 68-121 | 2 | 12 |
| Cadmium, 6010 | 92/ 91/ 98 | 59-130 | 1 | 24 |
| Chromium, 200.7 | 96/ 98/ 98 | 73-120 | 2 | 10 |
| Chromium, 6010 | 92/ 89/ 99 | 57-135 | 3 | 24 |
| Lead, 200.7 | 98/ 99/100 | 68-126 | 1 | 19 |
| Lead, 6010 | 102/101/101 | 63-128 | <1 | 26 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

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ENCO LABORATORIES

REPORT # : JAX10968

DATE REPORTED: May 3, 2000

REFERENCE : 2007

PROJECT NAME : Mayport Naval Station

PAGE 65 OF 65

QUALITY CONTROL DATA

| Parameter | % RECOVERY MS/MSD/LCS | ACCEPT LIMITS | % RPD MS/MSD | ACCEPT LIMITS |
|------------------------------|--------------------------|------------------|-----------------|------------------|
| Mercury, 245.1 | 113/111/112 | 70-136 | 2 | 12 |
| Mercury, 7471 | 115/135/118 | 71-138 | 16 | 13 |
| Selenium, 200.7 | 80/ 83/100 | 65-129 | 4 | 10 |
| Selenium, 6010 | 87/ 86/ 95 | 60-121 | 1 | 14 |
| Silver, 200.7 | 101/103/102 | 69-121 | 2 | 12 |
| Silver, 6010 | 97/ 95/101 | 69-118 | 2 | 10 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 119/120/ 89 | 51-163 | <1 | 27 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 80/ 68/ 74 | 62-204 | 16 | 25 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

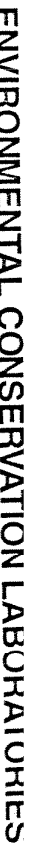
MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

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Cary, North Carolina 27513
(919) 377-1669 • Fax (919) 677-9846

CHAIN OF CUSTODY RECORD

type K-17 covers: ~~1x~~
 2x 4000 mds - HCL (B260)
 1x 1000 mds - HCL (B270)
 2x 1000 mds - HCL (B270)
 1x 500 mds - HCL (B270)
 1x 500 mds - HCL (B270)

Soil: 3x 402 mds
 (B270, F1A9)
 3x 500 mds
 (B260/5035)

ATTACHMENT B

Well Sampling Field Logs



Well Sampling Log

Date: 4/24/00 Time: 13:00 Project Number: Limited Closure
 Site Location: Mayport Naval Station Fuel Depot - Tanks #9, 100, 101
 Well I.D. MW-155 Depth of well (from TOC) 14.80 ft Depth to water 8.28 ft
 Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft
 Well Diameter 2 in. Well Construction _____ ft. _____ in. slotted screen Casing Material PVC
 Well Volume 1.0 gal Well Vol = $\frac{6.52}{H} \times \frac{1}{1^2} \times 0.163 = 1.0$ gal/vol
 $H = 14.80$ /TD - 8.28 /DTW = 6.52 ft
 Well Type: _____ upgradient _____ downgradient _____ hot spot _____ other _____
 Longitude _____ Latitude _____
 Purge Information:
 Purging eqpt: Tedon Bailer Purge rate: 0.5 gal/min.
 Purge Start Time: 13:28 Well Recharge Rate: Good

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|----|--------------|------------|------|-------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | | | | | |

Purge Stop Time: 13:38Total gallons purged: 5.0

Sample Information:

Sample Collection Time: 13:45Sample Collected Using: Tedon Bailer

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|-----------------|--------------------------|-----------------------------------|-------------------------|---|---|
| Sample Parameters | 8260 | 8270 | FI-Pro | total (8) RCA methyl | | |
| Sample Containers | 2x400L vials | 1x1000L glass (amber) | 2x1000L Ethel (amber) | 1x500L Poly | | |
| pH of Preserved Samples | HCL <2 | up | H ₂ SO ₄ <2 | HNO ₃ <2 | | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: Yes Color: milky Turbidity: moderate

Comments: _____

Field Instrument Information:

Instruments Used: N/A

Calibration: pH 4.0 _____ 7.0 _____ 10.0 _____ Conductivity: _____ Time/Date: _____

Ambient Conditions: Warm (80°F) overcast w/no 8-12 westField Personnel (name/title): Richard Morarty / Environmental ScientistSample delivered to laboratory by: Hand-Delivered



Well Sampling Log

Date: 4/24/00 Time: 14:00 Project Number: Limited Closure
 Site Location: Mayport Naval Station Fuel Depot - Tanks 79, 100, 101
 Well I.D. MW-035 Depth of well (from TOC) 15.30 ft Depth to water 10.22 ft
 Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft
 Well Diameter 2 in. Well Construction _____ ft. _____ in. slotted screen Casing Material PVC
 Well Volume 0.83 (41.0) gal Well Vol = $\frac{8.08}{H} \times \frac{1}{1^2} \times 0.163 = 0.23$ gal/vol
 $H = 15.30$ /TD - 10.22 /DTW = 5.08 ft

Well Type: _____ upgradient _____ downgradient _____ hot spot _____ other

Longitude _____ Latitude _____

Purge Information:

Purging eqpt: Teflon Bail

Purge rate: 0.5 gal/min.

Purge Start Time: 14:03

Well Recharge Rate: 6000

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|----|--------------|------------|------|-------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | | | | | |

Purge Stop Time: 14:13

Total gallons purged: 5.0

Sample Information:

Sample Collection Time: 14:15

Sample Collected Using: Teflon Bail

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|--------------|-----------------------|-----------------------|-----------------------|---|---|
| Sample Parameters | 8260 | 8270 | FI-PRO | total (8) RGA methyls | | |
| Sample Containers | 2x400L vials | 1x1000L glass (amber) | 2x1000L glass (amber) | 1x500L poly | | |
| pH of Preserved Samples | HCL <2 | NaP | H2SO4 <2 | HNO3 <2 | | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: No Color: Mostly Clear Turbidity: Low

Comments:

Field Instrument Information:

Instruments Used: N/A

Calibration: pH 4.0 _____ 7.0 _____ 10.0 _____ Conductivity: _____ Time/Date: _____

Ambient Conditions: Warm (80°F) overcast wind 8-12 west

Field Personnel (name/title): Richard Morarty / Environmental Scientist

Sample delivered to laboratory by: HA117 - Delivered

R. Morarty



Well Sampling Log

Date: 4/24/00 Time: 14:25 Project Number: Limited Closure
Site Location: emigrant Animal Station Fuel Depot - Tanks # 100, 101
Well I.D. MW-135 Depth of well (from TOC) 15.17 ft Depth to water 9.40 ft
Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft
Well Diameter 2 in. Well Construction _____ ft. _____ in. slotted screen Casing Material PVC
Well Volume 0.94 (91.0) gal Well Vol = $\frac{5.77}{H} \times \frac{1}{1^2} \times 0.163 = 0.94$ gal/vol
H = 15.17 /TD - 9.40 /DTW = 5.77 ft
Well Type: _____ upgradient _____ downgradient _____ hot spot _____ other
Longitude _____ Latitude _____
Purge Information:
Purging eqpt: Teflon Bailor Purge rate: 0.5 gal/min.
Purge Start Time: 1432 Well Recharge Rate: 6.00

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|----|--------------|------------|------|-------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | | | | | |

Purge Stop Time: 14:42Total gallons purged: 5.0

Sample Information:

Sample Collection Time: 14:45Sample Collected Using: Teflon Bailor

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|-----------------|--------------------------|--------------------------|-----------------------|---|---|
| Sample Parameters | 8260 | 8270 | FI-Pro | total (3) recharge | | |
| Sample Containers | 2x400L vials | 1x1000L glass (amber) | 2x1000L glass (amber) | 1x500L poly | | |
| pH of Preserved Samples | HCL C2 | up | H2SO4 C2 | HNO3 C2 | | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: No Color: mostly clear Turbidity: not seen

Comments: _____

Field Instrument Information:

Instruments Used: N/A

Calibration: pH 4.0 _____ 7.0 _____ 10.0 _____ Conductivity: _____ Time/Date: _____

Ambient Conditions: Warm (80°F) overcast w/ no B-12 westField Personnel (name/title): Richard Moriarty Environmental ScientistSample delivered to laboratory by: April - Delivered



TMW-1

Well Sampling Log

Date: 4/25/00 Time: 11:00 Project Number: Limited Closure
 Site Location: Mayport Naval Station Fuel Depot - Tanks #100, 101
 Well I.D. TMW-1 Depth of well (from TOC) 10.60 ft Depth to water 8.67 ft
 Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft
 Well Diameter 2 in. Well Construction _____ ft. in. slotted screen Casing Material PVC
 Well Volume 0.32 gal Well Vol = $\frac{1.93}{H} \times \frac{1}{1^2} \times 0.163 = \frac{0.31}{\text{gal/vol}}$
 $H = \frac{10.60}{\text{TD}} - \frac{8.67}{\text{DTW}} = \frac{1.93}{\text{ft}}$
 Well Type: _____ upgradient _____ downgradient _____ hot spot _____ other
 Longitude _____ Latitude _____
 Purge Information:
 Purging eqpt: Peristaltic Pump Purge rate: 0.2 gal/min.
 Purge Start Time: 11:27 Well Recharge Rate: 6000

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|----|--------------|------------|------|-------|
| 1 | 0.32 | | | | | |
| 2 | 0.64 | | | | | |
| 3 | 0.96 | | | | | |
| 4 | 1.18 | | | | | |
| 5 | 1.50 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | | | | | |

Purged well
5 volumes

Purge Stop Time: 11:36 Total gallons purged: 1.6
 Sample Information:
 Sample Collection Time: 11:40 Sample Collected Using: Teflon Bottle

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|-----------------|--------------------------|---------------------------|---------------------------|---|---|
| Sample Parameters | 8260 | 8270 | FI-PRO | total (2) PCRA methyls | | |
| Sample Containers | 2x400L vials | 1x1000L glass (amber) | 2x1000mL Ethel (amber) | 1x500L Poly | | |
| pH of Preserved Samples | HCL <2 | unp | H2SO4 <2 | HNO3 <2 | | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: Yes Color: Grey-clearing with Purging Turbidity: Moderate
 Comments: Installed TMW-1 @ 0930 - South of Tank #101, NEAR Piping
 Field Instrument Information:
 Instruments Used: N/A
 Calibration: pH 4.0 7.0 10.0 Conductivity: _____ Time/Date: _____
 Ambient Conditions: Warm (80°F) overcast w/d 8-12 west
 Field Personnel (name/title): Richard Morarty / Environmental Scientist

Sample delivered to laboratory by: Hand-Delivered

Richard Morarty



Well Sampling Log

Date: 4/05/00 Time: 11:45 Project Number: Limited Closure
 Site Location: emigrant Animal Station Fuel Depot - Tanks #9, 100, 101
 Well I.D.: TMW-2 Depth of well (from TOC): 10.60 ft Depth to water: 8.52 ft
 Relative to Mean Sea Level: Top of Casing (TOC): _____ ft Static Water Level _____ ft
 Well Diameter: 2 in. Well Construction: _____ ft. in. slotted screen Casing Material: PVC
 Well Volume: 0.34 gal Well Vol = $\frac{2.08}{H} \times \frac{1}{1^2} \times 0.163 = 0.34$ gal/vol
 H = 10.60 /TD = 8.52 /DTW = 2.08 ft
 Well Type: _____ upgradient _____ downgradient _____ hot spot _____ other
 Longitude _____ Latitude _____
 Purge Information: Pearl Harbor Bay
 Purging eqpt: _____ Purge rate: 0.2 gal/min.
 Purge Start Time: 12:07 Well Recharge Rate: 6000

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|----|--------------|------------|------|-------|
| 1 | 0.35 | | | | | |
| 2 | 0.7 | | | | | |
| 3 | 1.05 | | | | | |
| 4 | 1.40 | | | | | |
| 5 | 1.75 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | | | | | |

Purge Stop Time: 12:16

Total gallons purged: 2.6

Sample Information:

Sample Collection Time: 12:20

Sample Collected Using: Teflon Buckets

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|--------------|----------------------|----------------------|-------------|---|---|
| Sample Parameters | 8260 | 8270 | FI-Pro | total (2) | | |
| Sample Containers | 2x400L Vials | 1x1000L Glass Carboy | 2x1000L Glass Carboy | 1x500L Poly | | |
| pH of Preserved Samples | HCL <2 | unp | H2SO4 <2 | HNO3 <2 | | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: Slight Petro Color: Milky Turbidity: Moderate

Comments: Installed TMW-2 South of Tank #100, near P. pump

Field Instrument Information:

Instruments Used: N/A

Calibration: pH 4.0 _____ 7.0 _____ 10.0 _____ Conductivity: _____ Time/Date: _____

Ambient Conditions: Warm (80°F) overcast w/no B-12 west

Field Personnel (name/title): Richard Moriarty / Environmental Scientist

Sample delivered to laboratory by: HA117 - Delivered



Well Sampling Log

Date: 4/25/00 Time: 1230 Project Number: Limited Closure
 Site Location: Mayport Naval Station Fuel Depot - Tanks # 100, 101
 Well I.D. TNW-3 Depth of well (from TOC) 10.60 ft Depth to water 8.90 ft
 Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft
 Well Diameter _____ in. Well Construction _____ ft. in. slotted screen Casing Material PVC
 Well Volume 0.27 (0.3) gal Well Vol = $\frac{1.70}{H} \times \frac{1}{r^2} \times 0.163 = \frac{0.27}{\text{gal/vol}}$
 $H = 10.60 / TD - 8.90 / DTW = 1.70$ ft
 Well Type: _____ upgradient _____ downgradient _____ hot spot _____ other _____
 Longitude _____ Latitude _____
 Purge Information: _____
 Purging eqpt: Peristaltic Pump Purge rate: 0.2 gal/min.
 Purge Start Time: 12:34 Well Recharge Rate: 800.0

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|----|--------------|------------|------|-------|
| 1 | 0.3 | | | | | |
| 2 | 0.6 | | | | | |
| 3 | 0.9 | | | | | |
| 4 | 1.2 | | | | | |
| 5 | 1.5 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | | | | | |

Purge Stop Time: 12:43Total gallons purged: 1.5

Sample Information:

Sample Collection Time: 12:45Sample Collected Using: Teflon Bottle

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|------------------|---------------------------|--------------------------|---------------------------|---|---|
| Sample Parameters | 8260 | 8270 | FI-PRO | total (82) PCEA metals | | |
| Sample Containers | 2x400ul vials | 1x1000ul glass (amber) | 2x1000ul Bios (amber) | 1x500ul poly | | |
| pH of Preserved Samples | HCL <2 | UNP | H2SO4 <2 | HNO3 <2 | | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: No Color: Mostly clear Turbidity: LowComments: Installed TNW-3 @ Midpoint Return Tank # 100 + 101

Field Instrument Information:

Instruments Used: N/A

Calibration: pH 4.0 _____ 7.0 _____ 10.0 _____ Conductivity: _____ Time/Date: _____

Ambient Conditions: Warm (80°F) overcast wind 8-12 westField Personnel (name/title): Richard Moriarty / Environmental ScientistSample delivered to laboratory by: HAAD - Deliveries

**LIMITED TANK CLOSURE REPORT
ABOVEGROUND STORAGE TANK NO. 201
RELIABLE MECHANICAL JOB
MAYPORT NAVAL STATION
MAYPORT, FLORIDA**



**LIMITED TANK CLOSURE REPORT
ABOVEGROUND STORAGE TANK NO. 201
RELIABLE MECHANICAL JOB
MAYPORT NAVAL STATION
MAYPORT, FLORIDA**

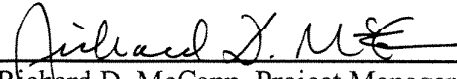
PREPARED FOR:

Environmental Recovery Group, Inc.
251 Levy Road
Atlantic Beach, Florida 32233-0569
ERG Job Number 2464

PREPARED BY:


Aerostar Environmental Services, Inc.
11200 St. Johns Industrial Parkway, Suite 1
Jacksonville, Florida 32246
(904) 565-2820

ROICC JAX AREA
02 APR 23 PM 1:57


Richard D. McCann, Project Manager

1/19/01

Date


Leon J. Carrero, P.G.; Manager, Environmental Services

1/19/01

Date

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| 2.0 STORAGE TANK REMOVAL PROCEDURES | 1 |
| 3.0 ENVIRONMENTAL MONITORING ACTIVITIES | 2 |
| 4.0 RECOMMENDATIONS | 4 |

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| TABLE 1 | Soil Screening Summary |
| TABLE 2 | Soil Analytical Summary |
| TABLE 3 | Groundwater Analytical Summary |

FIGURES

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|-----------------|----------------------------------|
| FIGURE 1 | Topographic Site Location Map |
| FIGURE 2 | Site Plan and Sampling Locations |

APPENDICES

| | |
|-------------------|---|
| APPENDIX A | Limited Closure Summary Report |
| APPENDIX B | Storage Tank Facility Registration Form |
| APPENDIX C | Photographic Documentation |
| APPENDIX D | Laboratory Analytical Reports |

1.0 INTRODUCTION

Aerostar Environmental Services, Inc. (AEROSTAR) provided environmental services during closure of an aboveground storage tank (AST) system designated as Tank Number 201, located at the Mayport Naval Station, Mayport, Duval County, Florida, Florida FDEP ID #168626008; hereafter referred to as the site. Tank Number 201 provided jet fuel to aircraft carriers stationed at Mayport Naval Station. A topographic map showing the location of the site is included as Figure 1. Demolition and closure activities for the AST, including tasking subcontractors, were managed by Reliable Mechanical, Inc. (RMI) of Louisville, Kentucky; the prime contractor on the MILCON project. Environmental assessment activities were conducted by AEROSTAR personnel in accordance with the guidelines established in the Storage Tank System Closure Assessment Requirements and following closure specifications provided by RMI. Based on the results of this investigation, further assessment is recommended for the area of the former AST system. The following sections present the AST system location and description, closure procedures and results of the environmental monitoring activities.

2.0 STORAGE TANK REMOVAL PROCEDURES

The former AST system was located approximately 200 feet south of the St. Johns River on the Mayport Naval Station and consisted of a 590,000-gallon steel tank containing JP-5 jet fuel. The AST was constructed of welded steel sheets on a one-foot thick round concrete pad approximately 86 feet in diameter. Information obtained by AEROSTAR indicated that the AST was installed in 1960. A site plan showing the location of the former AST system is included as Figure 2.

The AST system was removed between October 12 and October 20, 2000 by Realco Recycling and Wrecking Company subcontracted by Reliable Mechanical, Inc., the prime contractor in charge of the MILCON project. Prior to demolition, the remaining contents of Tank Number 201 were transferred to Tank Number 202 located at the site. The interior of the tank was cleaned by Environmental Recovery Group, Inc. (ERG) prior to transportation and off-site disposal of the sludge by Waste Reduction Systems, Inc. (WRS). The steel roof and walls of the tank were demolished and properly disposed of leaving only the steel tank bottom (approximately 0.5-inches thick) and the one-foot thick concrete pad. Copies of the Limited Closure Summary Report and the Storage Tank

Facility Registration Form are included in Appendices A and B, respectively. Photographic documentation of the site conditions during soil and groundwater sampling activities is included in Appendix C.

3.0 ENVIRONMENTAL MONITORING ACTIVITIES

On October 23, 2000, five soil borings (TB-1 through TB-5) were advanced in the former tank bottom and eight soil borings (PB-1 through PB-8) were advanced around the perimeter of the former tank to evaluate soil quality. Soil samples were collected during boring advancement at one-foot intervals from approximately one foot below land surface (BLS) to approximately four feet BLS using a three-inch diameter, stainless steel hand auger. The soil samples were screened with a calibrated portable Heath Tech Porta-FID III™ Organic Vapor Analyzer with a Flame Ionization Detector (OVA-FID). Each sample was also screened with a charcoal filter to differentiate the instrument's response to naturally occurring methane vapors. The difference between the readings is the vapor concentration attributed to petroleum hydrocarbons. In addition to the OVA-FID screening, each sample was inspected for signs of hydrocarbon staining and unusual odors. Soil sample collection and screening activities were conducted in accordance with AEROSTAR's FDEP-approved Comprehensive Quality Assurance Project Plan (CQAPP) #940023G.

Hydrocarbon vapors were detected above the State target level of 10 parts per million (ppm), established as a "positive field screening result" in Chapter 62-770, Florida Administrative Code (FAC). Maximum vapor concentrations detected in soil samples collected from PB-1, PB-7, and PB-8 ranged from 900 ppm to 2600 ppm. Hydrocarbon vapors detected in soil samples collected from borings TB-1 through TB-5 and PB-2 through PB-6 ranged from below detectable limits to 8 ppm. Results of the soil vapor screening are included in Table 1. The soil sample locations are shown in Figure 2.

On October 23, 2000, soil samples exhibiting the highest OVA responses were collected for laboratory analyses by Environmental Conservation Laboratories, Inc. (Enco) in Jacksonville, Florida. The samples were analyzed for the parameters listed in EPA Method 5035/8021A for Volatile Organic Aromatics (VOAs), EPA Method 8310 for Polynuclear Aromatic Hydrocarbons

(PAHs), and Total Recoverable Petroleum Hydrocarbons (TRPHs) by the FL-PRO Method. Soil sampling activities were conducted in accordance with AEROSTAR's FDEP-approved CQAPP #940023G.

Soil samples collected from PB-7 showed hydrocarbon concentrations of naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, and TRPH of 3.1 milligrams per kilogram (mg/kg), 8.8 mg/kg, 13 mg/kg, and 5,600 mg/kg, respectively. The leachability target levels established in Chapter 62-777, FAC for naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, and TRPH are 1.7 mg/kg, 2.2 mg/kg, 6.1 mg/kg, and 340 mg/kg, respectively. The TRPH concentrations detected in samples collected from PB-7 were also above the Residential and Commercial/Industrial Direct Exposure Limits of 340 mg/kg and 2,500 mg/kg, respectively. Analytical results from the remaining soil sampling points were either below the laboratory detection limits or below all State target levels. Soil analytical results are summarized in Table 2. Laboratory analytical reports are included in Appendix D.

On October 24, 2000, temporary wells were installed and groundwater samples were collected at the soil sampling locations shown in Figure 2. The temporary wells were installed approximately 6.5 to 7.0 feet BLS using a three-inch diameter, stainless steel hand auger. The water table surface was encountered at approximately 4.5 feet BLS during the assessment activities. Groundwater samples were collected from TB-1 through TB-5 and PB-1 through PB-8 for analysis of the parameters listed in EPA Method 601 for volatile organic compounds (VOCs), EPA Method 602 for VOAs, EPA Method 610 for PAHs, EPA Method 504 for ethylene dibromide, TRPH by the FL-PRO Method, EPA Method 200.7 for total lead. The samples were collected using disposable bailers after purging each well of five well volumes to ensure representative samples of actual aquifer conditions. Groundwater sampling activities were conducted in accordance with AEROSTAR's FDEP-approved CQAPP #940023G.

Groundwater samples collected from perimeter sampling points PB-1, PB-3, and PB-8 showed hydrocarbons concentrations which exceed State target levels established in Chapter 62-777, FAC.

Analytical results from the remaining groundwater sampling points were either below the laboratory detection limits or below all State target levels. Groundwater analytical results with corresponding State target levels are summarized in Table 3. The concentrations which exceed target levels are highlighted in Table 3. Laboratory analytical reports are included in Appendix D.

4.0 RECOMMENDATIONS

Petroleum hydrocarbon concentrations were detected above the State target levels established in Chapter 62-777, FAC, in the groundwater and soil samples collected for this investigation. Based on the results of the tank closure, further assessment activities are recommended for the area of the former AST system.

TABLES

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Reliable Mech./Mayport #2464

Facility ID No: 168626008

| SAMPLE | | | | OVA SCREENING RESULTS | | | |
|------------|----------------|----------------|------------------------|-----------------------|-----------------------|-------------------|--|
| BORING NO. | DATE COLLECTED | DEPTH TO WATER | SAMPLE INTERVAL (FBLs) | TOTAL READING (ppm) | CARBON FILTERED (ppm) | NET READING (ppm) | COMMENTS |
| TB-1 | 10/23/00 | ~4.5 | 1 | NA | NA | NA | TB-1 = Tank Bottom Sampling Location 1 |
| | | | 2 | 4 | .. | 4 | |
| | | | 3 | 6 | .. | 6 | |
| | | | 4 | 6 | .. | 6 | |
| TB-2 | 10/23/00 | ~4.5 | 1 | NA | NA | NA | |
| | | | 2 | 5 | .. | 5 | |
| | | | 3 | ND | .. | ND | |
| | | | 4 | 6 | .. | 6 | |
| TB-3 | 10/23/00 | ~4.5 | 1 | NA | NA | NA | |
| | | | 2 | ND | .. | ND | |
| | | | 3 | ND | .. | ND | |
| | | | 4 | 6 | .. | 6 | |
| TB-4 | 10/23/00 | ~4.5 | 1 | NA | NA | NA | |
| | | | 2 | ND | .. | ND | |
| | | | 3 | ND | .. | ND | |
| | | | 4 | ND | .. | ND | |
| TB-5 | 10/23/00 | ~4.5 | 1 | NA | NA | NA | |
| | | | 2 | 6 | .. | 6 | |
| | | | 3 | 1 | .. | 1 | |
| | | | 4 | 8 | .. | 8 | |
| PB-1 | 10/23/00 | ~4.5 | 1 | ND | .. | ND | PB-1 = Perimeter Boring 1 |
| | | | 2 | 2 | .. | 2 | |
| | | | 3 | 15 | 2 | 13 | |
| | | | 4 | 900 | ND | 900 | |
| PB-2 | 10/23/00 | ~4.5 | 1 | ND | .. | ND | |
| | | | 2 | 7 | .. | 7 | |
| | | | 3 | ND | .. | ND | |
| | | | 4 | ND | .. | ND | |
| PB-3 | 10/23/00 | ~4.0 | 1 | ND | .. | ND | |
| | | | 2 | ND | .. | ND | |
| | | | 3 | ND | .. | ND | |
| | | | 3.5 | 5 | .. | 5 | |
| PB-4 | 10/23/00 | ~4.5 | 1 | ND | .. | ND | |
| | | | 2 | ND | .. | ND | |
| | | | 3 | ND | .. | ND | |
| | | | 4 | ND | .. | ND | |
| PB-5 | 10/23/00 | ~4.5 | 1 | ND | .. | ND | |
| | | | 2 | ND | .. | ND | |
| | | | 3 | ND | .. | ND | |
| | | | 4 | ND | .. | ND | |
| PB-6 | 10/23/00 | ~4.5 | 1 | ND | .. | ND | |
| | | | 2 | ND | .. | ND | |
| | | | 3 | ND | .. | ND | |
| | | | 4 | ND | .. | ND | |
| PB-7 | 10/23/00 | ~4.5 | 1 | 1200 | ND | 1200 | |
| | | | 2 | 2050 | ND | 2050 | |
| | | | 3 | 2300 | ND | 2300 | |
| | | | 4 | 2600 | ND | 2600 | |
| PB-8 | 10/23/00 | ~4.5 | 1 | 2400 | ND | 2400 | |
| | | | 2 | 2550 | ND | 2550 | |
| | | | 3 | 1500 | ND | 1500 | |
| | | | 4 | 2300 | ND | 2300 | |

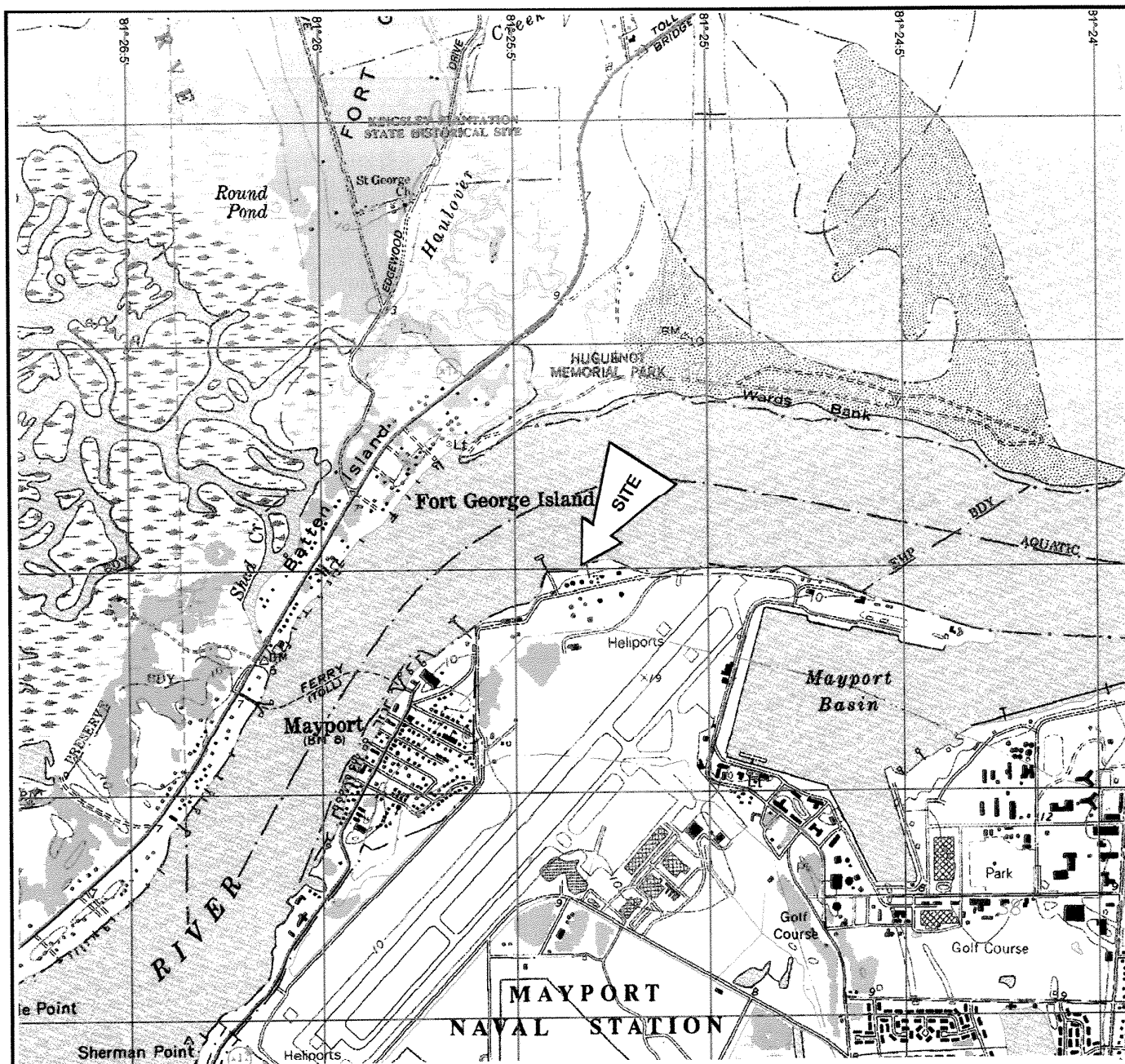
Facility ID Number: 168626008

[illegible]

Facility Name: Reliable Mech./Mayport #2464 Facility ID No: 168626008 Not Analyzed = NA
Below Detection Limits = BDL
All results in parts per billion (ppb)

[illegible]

FIGURES



MAYPORT QUADRANGLE

30081-B5-TF-024

PHOTOREVISED 1982

DMA 4744 IV NW-SERIES V847

7.5 MINUTE SERIES
(TOPOGRAPHIC)

CONTOUR INTERVAL 10 FEET



NATIONAL GEODETIC VERTICAL DATUM OF 1929

FIGURE 1 TOPOGRAPHIC SITE LOCATION MAP



MAYPORT TANK CLOSURE #1
MAYPORT NAVAL STATION

DRAWN BY: JJR

REFERENCE: MAP OF
MAYPORT, FLORIDA
PREPARED BY: U. S.
GEOLOGICAL SURVEY

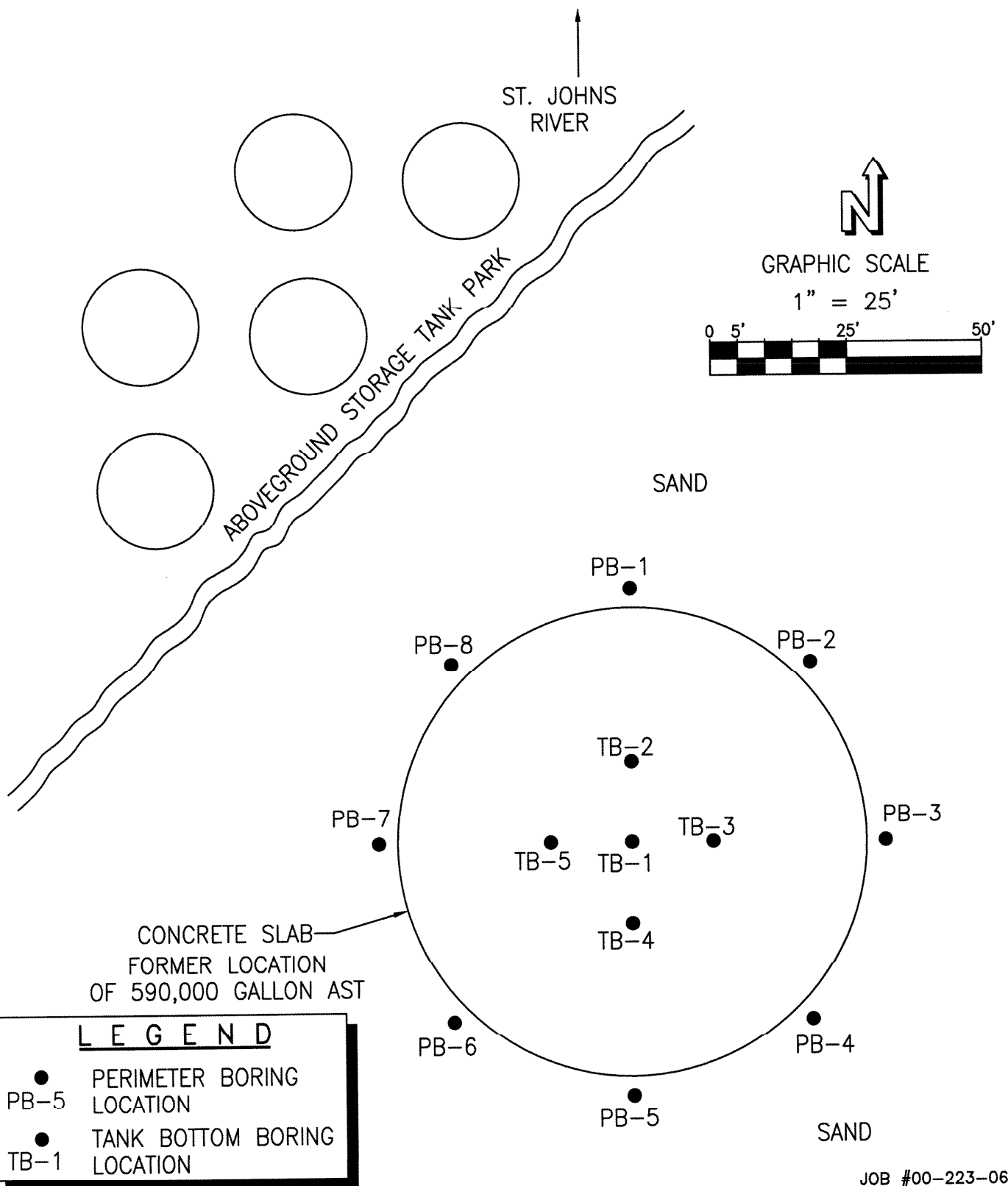


FIGURE 2. SITE PLAN AND SAMPLING LOCATIONS

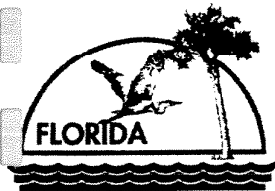


MAYPORT TANK CLOSURE #1
MAYPORT NAVAL AIR STATION
JACKSONVILLE, FLORIDA

DRAWN BY: KJS

DATE: 11/02/00

APPENDIX A
LIMITED CLOSURE SUMMARY REPORT



Department of Environmental Protection

1 Towers Office Building ♦ 2600 Blair Stone Road ♦ Tallahassee, Florida 32399-2400

DEP Form 62-761.900(8)
Form Title: Limited Closure
Summary Report:
Effective Date: July 13, 1998

Limited Closure Summary Report

This form is required for facilities that have sites with documented contamination requiring a site assessment in accordance with Chapter 62-770, F.A.C. This includes those facilities that are eligible for the Early Detection Incentive Program (EDI), the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP), and the Petroleum Cleanup Participation Program (PCPP), pursuant to Sections 376.3071 and 376.3072, F.S. Documentation of procedures followed, and results obtained during closure shall be reported in this form, along with any attachments. This form shall be submitted to the County within 60 days of completion of the closure in accordance with Section A of the "Storage Tank System Closure Assessment Requirements."

Complete All Applicable Blanks. Please Print or Type

General Information

| | | |
|--|---|---------------------------------|
| Date: <u>10/25/00</u> | FDEP Facility ID Number: <u>168626008</u> | County: <u>DUVAL</u> |
| Facility Name <u>MAYPORT NAVAL STATION</u> | | Facility Telephone #: () |
| Facility Address: _____ | | |
| Owner or Operator Name: _____ | | Owner/Operator phone #: () |
| Mailing Address: _____ | | |

Storage Tank System Closure Information

1. Were the storage tanks(s): (Check one or both)

| | |
|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> Aboveground | <input type="checkbox"/> Underground |
|--------------------------------------|--------------------------------------|

2. General System Information

| | | |
|--|---------------------------------|---------------------------------|
| Types of Products Stored: <u>JP-5 JET FUEL</u> | Number of Tanks: <u>ONE (1)</u> | Age(s) of Tanks: <u>~40YRS.</u> |
|--|---------------------------------|---------------------------------|

3. Was the Limited Closure Summary Report Performed as a Result of: (check one or more)

| | | |
|--|--|--|
| <input type="checkbox"/> Tank Systems Removal? | <input type="checkbox"/> Spill Containment Installation? | <input type="checkbox"/> Change in Storage to a Non-Regulated Substance? |
| <input type="checkbox"/> Tank Systems Closed in Place? | <input type="checkbox"/> Dispenser Liners Installation? | <input type="checkbox"/> Release Prevention Barrier Installation? |
| <input type="checkbox"/> Piping Sump Installation? | <input type="checkbox"/> Secondary Containment Installation? | <input type="checkbox"/> Other? (please explain) _____ |

4. Please Check Yes or No to the following:

| | | |
|---|------------------------------|-----------------------------|
| a. Was there previously reported contamination discovered on site? If yes, was | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 1. A Discharge Report Form submitted to the County? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. An investigation performed in accordance with Rule 62-761.820, F.A.C.? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Is the depth to groundwater less than 20 feet? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Are there monitoring wells on site? If yes, were they | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 1. Groundwater monitoring wells? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. Vapor monitoring wells? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. Used for closure assessment sampling? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. Properly closed? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 5. Retained for site assessment purposes? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. If tanks were replaced, were contaminated soils returned to the tank excavation? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

Signature of owner or operator

Signature of person performing
Limited Closure Assessment

Name of person performing
Limited Closure Assessment

(date) _____

(date) _____ Affiliation _____

Printed on recycled paper.



Florida Department of Environmental Protection
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Storage Tank Facility Registration Form

DEP Form # 62-761.900(2)

Form Title Storage Tank Registration Form

Effective Date July 13, 1998

DEP Application No. _____
(Filled in by DEP)

Submit a completed form for the facility when registration of storage tanks or compression vessels is required by Chapter 376.303, Florida Statutes

Please review **Registration Instructions** before completing the form.

| | | | |
|-----------------------------|--|---|--|
| Please check all that apply | <input type="checkbox"/> New Registration | <input type="checkbox"/> New Owner | <input type="checkbox"/> New Tanks |
| | <input type="checkbox"/> Facility Info Update/Correction | <input type="checkbox"/> Owner Info Update/Correction | <input type="checkbox"/> Tank Info Update/Correction |

A. FACILITY INFORMATION

County: **DUVAL**

DEP Facility ID: **168626008**

Facility Name: MAYPORT NAVAL STATION

Facility Address: _____ City: Jacksonville Zip: _____

Facility Contact: _____ Business Phone: (____) _____

Facility Type(s): _____ NAICS Code: _____ Financial Responsibility: _____

24 Hour Emergency Contact: _____ Emergency Phone: (____) _____

B. RESPONSIBLE PERSON INFORMATION - Identify Individual(s) or Business(es) responsible for storage tank management, fueling operations, and/or cleanup activities at the facility location named above. **Provide additional information in an attachment if necessary.**

| | | |
|--|---|----------------|
| Name: | Facility - Responsible Person Relation Type: | Effective Date |
| Mail address: | <input checked="" type="checkbox"/> Facility Account Owner (pays fees) | |
| City, ST, Zip: | Facility Account Owner information must be provided when the facility contains active (in-use) storage tanks on site. | |
| Contact: | | |
| Telephone: | STCM Account Number (if known) | |
| Identify other appropriate facility relationships for this party: <input type="checkbox"/> Facility Owner/Operator <input type="checkbox"/> Property Owner <input type="checkbox"/> Storage Tank Owner | | |

| | | |
|----------------|--|----------------|
| Name: | Other owner, relationship type(s) | Effective Date |
| Mail address: | <input type="checkbox"/> Facility Owner/Operator | |
| City, ST, Zip: | <input type="checkbox"/> Property Owner | |
| Contact: | <input type="checkbox"/> Storage Tank Owner | |
| Telephone: | <input type="checkbox"/> Other: | |

C. TANK/VESSEL INFORMATION - Complete one row for each storage tank or compression vessel system located at this facility.

| Tank ID | T/V | A/U | Capacity | Installed | Content | Status/Effective Date | Construction | Piping | Monitoring |
|---------|-----|-----|-----------|-----------|---------|-----------------------|--------------|--------|------------|
| 1 | T | A | 590000gal | 1960 | F | B 10/00 | C | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Certified Contractor (performing tank installation or removal): _____ DBPR License No.: _____

Registration Certification: To the best of my knowledge and belief, all information submitted on this form is true, accurate, and complete.

Printed Name & Title

Signature

Date

DEP 62-761.900(2)

Northwest District
160 Governmental Center Blvd.
Pensacola, FL 32501
850-595-8360

Northeast District
7825 Baymeadows Way,
Suite B200
Jacksonville, FL 32256
904-448-4300

Central District
3319 Maguire Blvd.,
Suite 232
Orlando, FL 32803
407-894-7555

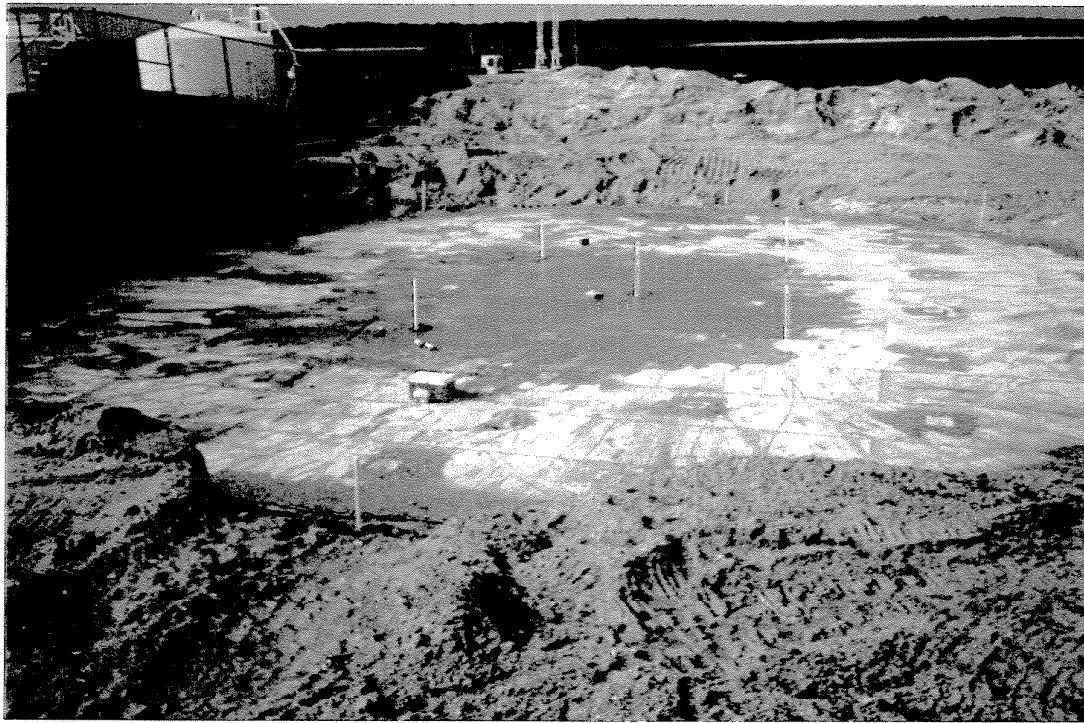
Southwest District
3804 Coconut Palm Drive
Tampa, FL 33619
813-744-6100

Southeast District
400 North Congress Ave.,
W Palm Beach, FL 33416
561-681-6600

South District
2295 Victoria Ave.,
Suite 364
Fort Myers, FL 33901
941-332-6975

Marathon Branch Office
2796 Overseas Hwy.,
Suite 221
Marathon, FL 33050
305-289-2310

APPENDIX C
PHOTOGRAPHIC DOCUMENTATION



1) Looking north across tank bottom showing soil/groundwater sampling points.



2) Looking northwest at 20,000-gallon ASTs containing lube oil.



3) Looking south across tank bottom.



4) Looking southeast at Tank Number 202 containing JP-5 jet fuel.



5) Looking east with Mayport Basin in background.



6) View of steel tank bottom and concrete pad at sampling location TB-4.

APPENDIX D
LABORATORY ANALYTICAL REPORTS

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX13981
DATE SUBMITTED: October 25, 2000
DATE REPORTED : November 6, 2000

PAGE 1 OF 37

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: 2624

Reliable Mech. Tank Clsr

| | |
|-----|---------------------------|
| #1 | - TB-1 @ 15:30 (10/24/00) |
| #2 | - TB-2 @ 16:30 (10/24/00) |
| #3 | - TB-3 @ 14:15 (10/24/00) |
| #4 | - TB-4 @ 13:45 (10/24/00) |
| #5 | - TB-5 @ 15:00 (10/24/00) |
| #6 | - TB-6 @ 12:00 (10/25/00) |
| #7 | - PB-1 @ 12:45 (10/24/00) |
| #8 | - PB-2 @ 12:15 (10/24/00) |
| #9 | - PB-3 @ 11:40 (10/24/00) |
| #10 | - PB-4 @ 11:00 (10/24/00) |
| #11 | - PB-5 @ 10:15 (10/24/00) |
| #12 | - PB-6 @ 09:30 (10/24/00) |
| #13 | - PB-7 @ 13:40 (10/24/00) |
| #14 | - PB-8 @ 13:15 (10/24/00) |

PROJECT MANAGER

Scott D. Martin

ENCO LABORATORIES

REPORT # : JAX13981

DATE REPORTED: November 6, 2000

REFERENCE : 2624

PROJECT NAME : Reliable Mech. Tank
Clsr

PAGE 2 OF 37

RESULTS OF ANALYSIS

EPA METHOD 601 -

VOLATILE HALOCARBONS

| | <u>TB-1</u> | <u>TB-2</u> | <u>Units</u> |
|---------------------------|----------------|----------------|---------------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 1.0 U | 1.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 100 | 84 | 37-161 |
| Date Analyzed | 10/28/00 | 10/29/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED:** November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr**PAGE 3 OF 37****RESULTS OF ANALYSIS****EPA METHOD 602 -
VOLATILE AROMATICS**

| | <u>TB-1</u> | <u>TB-2</u> | <u>Units</u> |
|-------------------------|----------------|----------------|---------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 2.7 | µg/L |
| o-Xylene | 1.0 U | 1.3 | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| Surrogate: | % RECOV | % RECOV | LIMITS |
| Bromofluorobenzene | 93 | 112 | 52-147 |
| Date Analyzed | 10/28/00 | 10/29/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

PAGE 4 OF 37

RESULTS OF ANALYSIS**EPA METHOD 8310 -****PAH BY HPLC**

| | <u>TB-1</u> | <u>TB-2</u> | <u>Units</u> |
|------------------------|-------------|-------------|--------------|
| Naphthalene | 0.50 U | 4.6 | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | 2.1 | µg/L |
| 2-Methylnaphthalene | 1.0 U | 2.3 | µg/L |
| Acenaphthene | 0.50 U | 0.57 | µg/L |
| Fluorene | 0.10 U | 0.31 | µg/L |
| Phenanthrene | 1.0 U | 2.8 | µg/L |
| Anthracene | 0.20 U | 6.2 | µg/L |
| Fluoranthene | 0.10 U | 1.9 | µg/L |
| Pyrene | 0.10 U | 1.3 | µg/L |
| Benzo(a)anthracene | 0.10 U | 0.10 U | µg/L |
| Chrysene | 0.10 U | 0.12 | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| p-terphenyl | 96 | 103 | 43-148 |
| Date Prepared | 10/31/00 | 10/31/00 | |
| Date Analyzed | 11/01/00 | 11/02/00 | |

EPA METHOD 504 -**ETHYLENE DIBROMIDE**

| | <u>TB-1</u> | <u>TB-2</u> | <u>Units</u> |
|--------------------|-------------|-------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 11/01/00 | 11/01/00 | |
| Date Analyzed | 11/02/00 | 11/02/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

PAGE 5 OF 37

RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TB-1</u> | <u>TB-2</u> | <u>Units</u> |
|---------------------|---------------|-------------|-------------|--------------|
| Lead | 200.7 | 0.0070 I | 0.0050 U | mg/L |
| Date Analyzed | | 10/31/00 | 10/31/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TB-1</u> | <u>TB-2</u> | <u>Units</u> |
|---|-------------|-------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | 0.80 | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| o-Terphenyl | 79 | 96 | 65-140 |
| Date Prepared | 10/31/00 | 10/31/00 | |
| Date Analyzed | 11/01/00 | 11/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

I = Analyte detected; value is between the Method Detection Level (MDL)
and the Practical Quantitation Level (PQL).

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

PAGE 6 OF 37

RESULTS OF ANALYSIS**EPA METHOD 601 -****VOLATILE HALOCARBONS****TB-3****TB-4****Units**

| | | | |
|---------------------------|-------|-------|------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 1.0 U | 1.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:**% RECOV****% RECOV****LIMITS**

Bromofluorobenzene

101

105

37-161

Date Analyzed

10/28/00

10/28/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED:** November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr**PAGE 7 OF 37****RESULTS OF ANALYSIS****EPA METHOD 602 -
VOLATILE AROMATICS**

| | <u>TB-3</u> | <u>TB-4</u> | <u>Units</u> |
|-------------------------|-------------|-------------|--------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 1.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|----------------|---------------|
| Bromofluorobenzene | 98 | 96 | 52-147 |
| Date Analyzed | 10/28/00 | 10/28/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED:** November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS**EPA METHOD 8310 -
PAH BY HPLC**

| | <u>TB-3</u> | <u>TB-4</u> | <u>Units</u> |
|------------------------|-------------|-------------|--------------|
| Naphthalene | 0.50 U | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | 0.50 U | µg/L |
| Fluorene | 0.10 U | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | 0.10 U | µg/L |
| Pyrene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | 0.10 U | µg/L |
| Chrysene | 0.10 U | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| p-terphenyl | 115 | 93 | 43-148 |
| Date Prepared | 10/31/00 | 10/31/00 | |
| Date Analyzed | 11/02/00 | 11/02/00 | |

EPA METHOD 504 -**ETHYLENE DIBROMIDE**

| | <u>TB-3</u> | <u>TB-4</u> | <u>Units</u> |
|--------------------|-------------|-------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 11/01/00 | 11/01/00 | |
| Date Analyzed | 11/02/00 | 11/02/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX13981
DATE REPORTED: November 6, 2000
REFERENCE : 2624
PROJECT NAME : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TB-3</u> | <u>TB-4</u> | <u>Units</u> |
|---------------------|---------------|-------------|-------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 I | mg/L |
| Date Analyzed | | 10/31/00 | 10/31/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>TB-3</u> | <u>TB-4</u> | <u>Units</u> |
|--------------------------|-----------------------|-----------------------|----------------------|
| Hydrocarbons (C8-C40) | 0.20 U | 0.20 U | mg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 89 | 84 | 65-140 |
| Date Prepared | 10/31/00 | 10/31/00 | |
| Date Analyzed | 11/01/00 | 11/01/00 | |

U = Compound was analyzed for but not detected to the level shown.
I = Analyte detected; value is between the Method Detection Level (MDL)
and the Practical Quantitation Level (PQL).

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr**PAGE 10 OF 37****RESULTS OF ANALYSIS****EPA METHOD 601 -****VOLATILE HALOCARBONS**

| | <u>TB-5</u> | <u>TB-6</u> | <u>Units</u> |
|---------------------------|--------------------|--------------------|---------------------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 1.0 U | 1.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|-----------------------|-----------------------|----------------------|
| Bromofluorobenzene | 106 | 105 | 37-161 |
| Date Analyzed | 10/28/00 | 10/28/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED:** November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

DUP

**EPA METHOD 602 -
VOLATILE AROMATICS**

| | <u>TB-5</u> | <u>TB-6</u> | <u>Units</u> |
|-------------------------|-------------|-------------|--------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 2.1 | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|----------------|---------------|
| Bromofluorobenzene | 98 | 80 | 52-147 |
| Date Analyzed | 10/28/00 | 10/29/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX13981

DATE REPORTED: November 6, 2000

REFERENCE : 2624

PROJECT NAME : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

| | <u>TB-5</u> | <u>TB-6</u> | <u>Units</u> |
|------------------------|-------------|-------------|--------------|
| Naphthalene | 0.50 U | 3.2 | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | 1.9 | µg/L |
| 2-Methylnaphthalene | 1.0 U | 1.7 | µg/L |
| Acenaphthene | 0.50 U | 0.50 U | µg/L |
| Fluorene | 0.10 U | 0.17 | µg/L |
| Phenanthrene | 1.0 U | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 0.23 | 1.1 | µg/L |
| Pyrene | 0.14 | 0.75 | µg/L |
| Benzo(a)anthracene | 0.10 U | 0.10 U | µg/L |
| Chrysene | 0.10 U | 0.11 | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| p-terphenyl | 106 | 104 | 43-148 |
| Date Prepared | 10/31/00 | 10/31/00 | |
| Date Analyzed | 11/02/00 | 11/02/00 | |

EPA METHOD 504 -

ETHYLENE DIBROMIDE

| | <u>TB-5</u> | <u>TB-6</u> | <u>Units</u> |
|--------------------|-------------|-------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 11/01/00 | 11/01/00 | |
| Date Analyzed | 11/02/00 | 11/02/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TB-5</u> | <u>TB-6</u> | <u>Units</u> |
|---------------------|---------------|-------------|-------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 10/31/00 | 10/31/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>TB-5</u> | <u>TB-6</u> | <u>Units</u> |
|-----------------------|-------------|-------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | 1.2 | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| o-Terphenyl | 84 | 101 | 65-140 |
| Date Prepared | 10/31/00 | 10/31/00 | |
| Date Analyzed | 11/01/00 | 11/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX13981

DATE REPORTED: November 6, 2000

REFERENCE : 2624

PROJECT NAME : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

EPA METHOD 601 -

VOLATILE HALOCARBONS

PB-1

PB-2

Units

| | | | |
|---------------------------|-------|-------|------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 1.0 U | 1.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:

% RECOV

% RECOV

LIMITS

Bromofluorobenzene

79

101

37-161

Date Analyzed

10/30/00

10/28/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS**EPA METHOD 602 -
VOLATILE AROMATICS**

| | <u>PB-1</u> | <u>PB-2</u> | <u>Units</u> |
|-------------------------|-------------|-------------|--------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 1.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|----------------|---------------|
| Bromofluorobenzene | 89 | 105 | 52-147 |
| Date Analyzed | 10/30/00 | 10/28/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS**EPA METHOD 8310 -****PAH BY HPLC**

| | <u>PB-1</u> | | <u>PB-2</u> | <u>Units</u> |
|------------------------|--------------------|----|--------------------|---------------------|
| Naphthalene | 170 | D1 | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | | 1.0 U | µg/L |
| 1-Methylnaphthalene | 300 | D1 | 1.0 U | µg/L |
| 2-Methylnaphthalene | 330 | D1 | 1.0 U | µg/L |
| Acenaphthene | 3.6 | | 0.50 U | µg/L |
| Fluorene | 4.4 | | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | | 1.0 U | µg/L |
| Anthracene | 0.20 U | | 0.20 U | µg/L |
| Fluoranthene | 8.0 | | 0.10 U | µg/L |
| Pyrene | 3.0 | | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | | 0.10 U | µg/L |
| Chrysene | 0.10 U | | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|-----------------------|--|-----------------------|----------------------|
| p-terphenyl | 111 | | 109 | 43-148 |
| Date Prepared | 10/31/00 | | 10/31/00 | |
| Date Analyzed | 11/02/00 | | 11/02/00 | |

EPA METHOD 504 -**ETHYLENE DIBROMIDE**

| | <u>PB-1</u> | | <u>PB-2</u> | <u>Units</u> |
|--------------------|--------------------|--|--------------------|---------------------|
| Ethylene Dibromide | 0.020 U | | 0.020 U | µg/L |
| Date Prepared | 11/01/00 | | 11/01/00 | |
| Date Analyzed | 11/02/00 | | 11/02/00 | |

U = Compound was analyzed for but not detected to the level shown.

D1 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB-1</u> | <u>PB-2</u> | <u>Units</u> |
|---------------------|---------------|-------------|-------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 10/31/00 | 10/31/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>PB-1</u> | <u>PB-2</u> | <u>Units</u> |
|--------------------------|-----------------------|-----------------------|----------------------|
| Hydrocarbons (C8-C40) | 15 D2 | 0.20 U | mg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 100 | 95 | 65-140 |
| Date Prepared | 10/31/00 | 10/31/00 | |
| Date Analyzed | 11/02/00 | 11/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

D2 = Analyte value determined from a 1:2 dilution.

ENCO LABORATORIES

REPORT # : JAX13981

DATE REPORTED: November 6, 2000

REFERENCE : 2624

PROJECT NAME : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

EPA METHOD 601 -

VOLATILE HALOCARBONS

PB-3

PB-4

Units

| | | | |
|---------------------------|-------|-------|------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 1.0 U | 1.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:

% RECOV

% RECOV

LIMITS

Bromofluorobenzene

104

101

37-161

Date Analyzed

10/28/00

10/28/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS**EPA METHOD 602 -
VOLATILE AROMATICS**

| | <u>PB-3</u> | <u>PB-4</u> | <u>Units</u> |
|--------------------------|-----------------------|-----------------------|----------------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 2.2 | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 1.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 95 | 96 | 52-147 |
| Date Analyzed | 10/28/00 | 10/28/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS**EPA METHOD 8310 -****PAH BY HPLC**

| | <u>PB-3</u> | <u>PB-4</u> | <u>Units</u> |
|------------------------|-------------|-------------|--------------|
| Naphthalene | 0.50 U | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | 0.50 U | µg/L |
| Fluorene | 0.10 U | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 0.23 | 0.10 U | µg/L |
| Pyrene | 0.21 | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | 0.10 U | µg/L |
| Chrysene | 0.10 U | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| p-terphenyl | 115 | 113 | 43-148 |
| Date Prepared | 10/31/00 | 10/31/00 | |
| Date Analyzed | 11/02/00 | 11/02/00 | |

EPA METHOD 504 -**ETHYLENE DIBROMIDE**

| | <u>PB-3</u> | <u>PB-4</u> | <u>Units</u> |
|--------------------|-------------|-------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 11/01/00 | 11/01/00 | |
| Date Analyzed | 11/02/00 | 11/02/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB-3</u> | <u>PB-4</u> | <u>Units</u> |
|---------------------|---------------|-------------|-------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 10/31/00 | 10/31/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>PB-3</u> | <u>PB-4</u> | <u>Units</u> |
|-----------------------|-------------|-------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | 0.20 U | mg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| o-Terphenyl | 107 | 95 | 65-140 |
| Date Prepared | 10/31/00 | 10/31/00 | |
| Date Analyzed | 11/01/00 | 11/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS**EPA METHOD 601 -
VOLATILE HALOCARBONS****PB-5****PB-6****Units**

| | | | |
|---------------------------|-------|-------|------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 1.0 U | 1.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:**% RECOV****% RECOV****LIMITS**

Bromofluorobenzene

100

104

37-161

Date Analyzed

10/28/00

10/28/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr**PAGE 23 OF 37****RESULTS OF ANALYSIS****EPA METHOD 602 -
VOLATILE AROMATICS****PB-5****PB-6****Units**

Methyl tert-butyl ether

2.0 U

2.0 U

µg/L

Benzene

1.0 U

1.0 U

µg/L

Toluene

1.0 U

1.0 U

µg/L

Chlorobenzene

1.0 U

1.0 U

µg/L

Ethylbenzene

1.0 U

1.0 U

µg/L

m-Xylene & p-Xylene

1.0 U

1.0 U

µg/L

o-Xylene

1.0 U

1.0 U

µg/L

1,3-Dichlorobenzene

1.0 U

1.0 U

µg/L

1,4-Dichlorobenzene

1.0 U

1.0 U

µg/L

1,2-Dichlorobenzene

1.0 U

1.0 U

µg/L

Surrogate:**% RECOV****% RECOV****LIMITS**

Bromofluorobenzene

95

94

52-147

Date Analyzed

10/28/00

10/28/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS**EPA METHOD 8310 -****PAH BY HPLC**

| | <u>PB-5</u> | <u>PB-6</u> | <u>Units</u> |
|------------------------|--------------------|--------------------|---------------------|
| Naphthalene | 0.50 U | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | 0.50 U | µg/L |
| Fluorene | 0.10 U | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | 0.10 U | µg/L |
| Pyrene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | 0.10 U | µg/L |
| Chrysene | 0.10 U | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|-----------------------|-----------------------|----------------------|
| p-terphenyl | 107 | 119 | 43-148 |
| Date Prepared | 10/31/00 | 10/31/00 | |
| Date Analyzed | 11/02/00 | 11/02/00 | |

EPA METHOD 504 -**ETHYLENE DIBROMIDE**

| | <u>PB-5</u> | <u>PB-6</u> | <u>Units</u> |
|--------------------|--------------------|--------------------|---------------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 11/01/00 | 11/01/00 | |
| Date Analyzed | 11/02/00 | 11/02/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr**PAGE 25 OF 37****RESULTS OF ANALYSIS**

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB-5</u> | <u>PB-6</u> | <u>Units</u> |
|---------------------|---------------|-------------|-------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 10/31/00 | 10/31/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>PB-5</u> | <u>PB-6</u> | <u>Units</u> |
|-----------------------|-------------|-------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | 0.20 U | mg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| o-Terphenyl | 103 | 93 | 65-140 |
| Date Prepared | 10/31/00 | 10/31/00 | |
| Date Analyzed | 11/01/00 | 11/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX13981

DATE REPORTED: November 6, 2000

REFERENCE : 2624

PROJECT NAME : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

EPA METHOD 601 -

VOLATILE HALOCARBONS

| | <u>PB-7</u> | <u>PB-8</u> | <u>Units</u> |
|---------------------------|-------------|-------------|--------------|
| Dichlorodifluoromethane | 1.0 U | 5.0 U D3 | µg/L |
| Chloromethane | 1.0 U | 5.0 U D3 | µg/L |
| Vinyl Chloride | 1.0 U | 5.0 U D3 | µg/L |
| Bromomethane | 1.0 U | 5.0 U D3 | µg/L |
| Chloroethane | 1.0 U | 5.0 U D3 | µg/L |
| Trichlorofluoromethane | 2.0 U | 10 U D3 | µg/L |
| 1,1-Dichloroethene | 1.0 U | 5.0 U D3 | µg/L |
| Methylene Chloride | 1.0 U | 5.0 U D3 | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 5.0 U D3 | µg/L |
| 1,1-Dichloroethane | 1.0 U | 5.0 U D3 | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 5.0 U D3 | µg/L |
| Chloroform | 1.0 U | 5.0 U D3 | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 5.0 U D3 | µg/L |
| Carbon Tetrachloride | 1.0 U | 5.0 U D3 | µg/L |
| 1,2-Dichloroethane | 1.0 U | 5.0 U D3 | µg/L |
| Trichloroethene | 1.0 U | 5.0 U D3 | µg/L |
| 1,2-Dichloropropane | 1.0 U | 5.0 U D3 | µg/L |
| Bromodichloromethane | 1.0 U | 5.0 U D3 | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 5.0 U D3 | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 5.0 U D3 | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 5.0 U D3 | µg/L |
| Tetrachloroethene | 1.0 U | 5.0 U D3 | µg/L |
| Dibromochloromethane | 1.0 U | 5.0 U D3 | µg/L |
| Chlorobenzene | 1.0 U | 5.0 U D3 | µg/L |
| Bromoform | 1.0 U | 5.0 U D3 | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 5.0 U D3 | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 5.0 U D3 | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 5.0 U D3 | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 5.0 U D3 | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|----------------|---------------|
| Bromofluorobenzene | 78 | 86 | 37-161 |
| Date Analyzed | 10/30/00 | 10/29/00 | |

U = Compound was analyzed for but not detected to the level shown.

D3 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED:** November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS**EPA METHOD 602 -
VOLATILE AROMATICS**

| | <u>PB-7</u> | <u>PB-8</u> | <u>Units</u> |
|-------------------------|----------------|----------------|---------------|
| Methyl tert-butyl ether | 2.0 U | 10 U D3 | µg/L |
| Benzene | 1.0 U | 5.0 U D3 | µg/L |
| Toluene | 1.0 U | 5.0 U D3 | µg/L |
| Chlorobenzene | 1.0 U | 5.0 U D3 | µg/L |
| Ethylbenzene | 1.0 U | 5.0 U D3 | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 5.0 U D3 | µg/L |
| o-Xylene | 1.0 U | 5.0 U D3 | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 5.0 U D3 | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 5.0 U D3 | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 5.0 U D3 | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 81 | 124 | 52-147 |
| Date Analyzed | 10/30/00 | 10/29/00 | |

U = Compound was analyzed for but not detected to the level shown.
D3 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES

REPORT # : JAX13981

DATE REPORTED: November 6, 2000

REFERENCE : 2624

PROJECT NAME : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

| | <u>PB-7</u> | <u>PB-8</u> | <u>Units</u> |
|------------------------|-------------|-------------|--------------|
| Naphthalene | 1.1 | 1000 D4 | µg/L |
| Acenaphthylene | 1.2 | 1.0 U | µg/L |
| 1-Methylnaphthalene | 37 | 1500 D4 | µg/L |
| 2-Methylnaphthalene | 17 | 2200 D4 | µg/L |
| Acenaphthene | 2.7 | 39 | µg/L |
| Fluorene | 1.5 | 49 | µg/L |
| Phenanthrene | 1.0 U | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 5.3 | 170 D4 | µg/L |
| Pyrene | 4.1 | 110 D4 | µg/L |
| Benzo(a)anthracene | 0.77 | 31 | µg/L |
| Chrysene | 0.53 | 22 | µg/L |
| Benzo(b)fluoranthene | 0.21 | 7.5 | µg/L |
| Benzo(k)fluoranthene | 0.14 | 4.5 | µg/L |
| Benzo(a)pyrene | 0.21 | 7.3 | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 1.5 | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 2.0 | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 2.8 | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| p-terphenyl | 106 | 0 U | 43-148 |
| Date Prepared | 10/31/00 | 10/31/00 | |
| Date Analyzed | 11/02/00 | 11/02/00 | |

EPA METHOD 504 -

ETHYLENE DIBROMIDE

| | <u>PB-7</u> | <u>PB-8</u> | <u>Units</u> |
|--------------------|-------------|-------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 11/01/00 | 11/01/00 | |
| Date Analyzed | 11/02/00 | 11/02/00 | |

U = Compound was analyzed for but not detected to the level shown.

D4 = Analyte value determined from a 1:50 dilution.

ENCO LABORATORIES

REPORT # : JAX13981

DATE REPORTED: November 6, 2000

REFERENCE : 2624

PROJECT NAME : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB-7</u> | <u>PB-8</u> | <u>Units</u> |
|---------------------|---------------|-------------|-------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 10/31/00 | 10/31/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>PB-7</u> | <u>PB-8</u> | <u>Units</u> |
|-----------------------|-------------|-------------|--------------|
| Hydrocarbons (C8-C40) | 8.8 D2 | 320 D4 | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| o-Terphenyl | 97 | * | 65-140 |
| Date Prepared | 10/31/00 | 10/31/00 | |
| Date Analyzed | 11/02/00 | 11/02/00 | |

* = Surrogate recovery unavailable due to sample silution.

U = Compound was analyzed for but not detected to the level shown.

D2 = Analyte value determined from a 1:2 dilution.

D4 = Analyte value determined from a 1:50 dilution.

ENCO LABORATORIES

REPORT # : JAX13981

DATE REPORTED: November 6, 2000

REFERENCE : 2624

PROJECT NAME : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

EPA METHOD 601 -

VOLATILE HALOCARBONS

| | <u>LAB BLANK</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------------|------------------|------------------|---------------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 1.0 U | 1.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 102 | 86 | 37-161 |
| Date Analyzed | 10/28/00 | 10/29/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED:** November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS**EPA METHOD 602 -
VOLATILE AROMATICS**

| | <u>LAB BLANK</u> | <u>LAB BLANK</u> | <u>Units</u> |
|--------------------------|-----------------------|-----------------------|----------------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 1.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 94 | 108 | 52-147 |
| Date Analyzed | 10/28/00 | 10/29/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED:** November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS**EPA METHOD 8310 -
PAH BY HPLC**

| | <u>LAB BLANK</u> | <u>Units</u> |
|------------------------|------------------|--------------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|---------------|
| p-terphenyl | 114 | 43-148 |
| Date Prepared | 10/31/00 | |
| Date Analyzed | 11/01/00 | |

**EPA METHOD 504 -
ETHYLENE DIBROMIDE**

| | <u>LAB BLANK</u> | <u>Units</u> |
|--------------------|------------------|--------------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Prepared | 11/01/00 | |
| Date Analyzed | 11/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------|---------------|------------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 10/30/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>LAB BLANK</u> | <u>Units</u> |
|-----------------------|------------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|---------------|
| o-Terphenyl | 78 | 65-140 |
| Date Prepared | 10/31/00 | |
| Date Analyzed | 11/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX13981
DATE REPORTED: November 6, 2000
REFERENCE : 2624
PROJECT NAME : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>LAB BLANK</u> | <u>Units</u> |
|----------------------------|----------------------|-------------------------|---------------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 10/30/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>LAB BLANK</u> | <u>Units</u> |
|--|-------------------------|----------------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 78 | 65-140 |
| Date Prepared | 10/31/00 | |
| Date Analyzed | 11/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX13981

DATE REPORTED: November 6, 2000

REFERENCE : 2624

PROJECT NAME : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS

EPA METHOD 601 -

VOLATILE HALOCARBONS

| | <u>LAB</u> <u>BLANK</u> | <u>LAB</u> <u>BLANK</u> | <u>Units</u> |
|---------------------------|-------------------------|-------------------------|---------------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 1.0 U | 1.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 98 | 74 | 37-161 |
| Date Analyzed | 10/29/00 | 10/30/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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RESULTS OF ANALYSIS**EPA METHOD 602 -
VOLATILE AROMATICS**

| | <u>LAB</u> <u>BLANK</u> | <u>LAB</u> <u>BLANK</u> | <u>Units</u> |
|--------------------------|-------------------------|-------------------------|----------------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 1.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 87 | 87 | 52-147 |
| Date Analyzed | 10/30/00 | 10/30/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED**: November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY MS/MSD/LCS</u> | <u>ACCEPT LIMITS</u> | <u>% RPD MS/MSD</u> | <u>ACCEPT LIMITS</u> |
|------------------------|----------------------------------|--------------------------|-------------------------|--------------------------|
| <u>EPA Method 601</u> | | | | |
| Methylene Chloride | 97/ 93/ 94 | 45-161 | 4 | 29 |
| Chloroform | 107/100/101 | 64-154 | 7 | 16 |
| Carbon Tetrachloride | 119/112/111 | 71-165 | 6 | 21 |
| Trichloroethene | 122/116/118 | 69-158 | 5 | 24 |
| Tetrachloroethene | 102/ 99/109 | 63-166 | 3 | 21 |
| Chlorobenzene | 97/ 96/100 | 67-147 | 1 | 19 |
| <u>EPA Method 602</u> | | | | |
| Benzene | 87/ 84/ 84 | 60-138 | 4 | 17 |
| Toluene | 81/ 81/ 85 | 57-138 | <1 | 16 |
| Ethylbenzene | 94/ 92/ 93 | 49-144 | 2 | 17 |
| o-Xylene | 93/ 88/ 89 | 50-151 | 6 | 17 |
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 65/ 81/ 77 | 59-111 | 22 | 12 |
| Acenaphthene | 68/ 86/ 75 | 58-128 | 23 | 13 |
| Benzo(a)pyrene | 82/ 91/ 88 | 78-134 | 10 | 15 |
| Benzo(g,h,i)perylene | 87/103/ 92 | 62-115 | 17 | 30 |
| <u>EPA Method 504</u> | | | | |
| Ethylene Dibromide | 112/112/108 | 57-130 | <1 | 18 |
| Dibromochloropropane | 100/104/ 96 | 60-130 | 4 | 20 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

ENCO LABORATORIES**REPORT #** : JAX13981**DATE REPORTED:** November 6, 2000**REFERENCE** : 2624**PROJECT NAME** : Reliable Mech. Tank
Clsr

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY MS/MSD/LCS</u> | <u>ACCEPT LIMITS</u> | <u>% RPD MS/MSD</u> | <u>ACCEPT LIMITS</u> |
|---|----------------------------------|--------------------------|-------------------------|--------------------------|
| <u>TOTAL METALS</u> Lead, 200.7 | 96/101/ 98 | 68-126 | 5 | 19 |
| <u>PETROL. RESIDUAL ORG.</u> Hydrocarbons (C8-C40) | 93/ 93/ 71 | - | <1 | |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX13950
DATE SUBMITTED: October 24, 2000
DATE REPORTED : November 7, 2000

PAGE 1 OF 26

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT : MAYPORT NAVAL ST.

Tank Closure

10/23/00

| | | |
|-----|-------------|---------|
| #1 | - TB 1-4' | @ 16:35 |
| #2 | - TB 2-4' | @ 16:05 |
| #3 | - TB 3-4' | @ 15:00 |
| #4 | - TB 4-4' | @ 15:10 |
| #5 | - TB 5-3.5' | @ 16:25 |
| #6 | - PB 1-4' | @ 09:10 |
| #7 | - PB 2-2' | @ 09:24 |
| #8 | - PB 3-3.5 | @ 09:43 |
| #9 | - PB 4-4' | @ 11:26 |
| #10 | - PB 5-4' | @ 11:37 |
| #11 | - PB 6-4' | @ 11:50 |
| #12 | - PB 7-4' | @ 13:28 |
| #13 | - PB 8-2' | @ 13:45 |

PROJECT MANAGER

Scott D. Martin

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED**: November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 8260 -**
VOLATILE ORGANICS

| | <u>TB 1-4'</u> | <u>TB 2-4'</u> | <u>Units</u> |
|-------------------------|-----------------------|-----------------------|---------------------|
| Methyl tert-butyl ether | 1.3 U D1 | 1.0 U | µg/Kg |
| Benzene | 1.3 U D1 | 1.2 U | µg/Kg |
| Toluene | 1.3 U D1 | 2.3 | µg/Kg |
| Ethylbenzene | 1.3 U D1 | 3.1 | µg/Kg |
| m-Xylene & p-Xylene | 2.5 U D1 | 2.0 U | µg/Kg |
| o-Xylene | 1.3 U D1 | 4.3 | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------------|-----------------------|-----------------------|----------------------|
| Dibromofluoromethane | 119 | 106 | 69-138 |
| D8-Toluene | 138 | 135 | 67-123 |
| Bromofluorobenzene | 106 | 108 | 64-131 |
| Date Analyzed | 11/06/00 | 11/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

D1 = Analyte value determined from a 1:1.15 dilution.

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED**: November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure**PAGE 3 OF 26****RESULTS OF ANALYSIS****EPA METHOD 8310 -****PAH BY HPLC**

| | <u>TB 1-4'</u> | <u>TB 2-4'</u> | <u>Units</u> |
|------------------------|-----------------------|-----------------------|---------------------|
| Naphthalene | 18 U | 20 U | µg/Kg |
| Acenaphthylene | 36 U | 41 U | µg/Kg |
| 1-Methylnaphthalene | 36 U | 41 U | µg/Kg |
| 2-Methylnaphthalene | 36 U | 41 U | µg/Kg |
| Acenaphthene | 18 U | 20 U | µg/Kg |
| Fluorene | 3.6 U | 4.1 U | µg/Kg |
| Phenanthrene | 36 U | 41 U | µg/Kg |
| Anthracene | 18 U | 20 U | µg/Kg |
| Fluoranthene | 3.6 U | 4.1 U | µg/Kg |
| Pyrene | 3.6 U | 4.1 U | µg/Kg |
| Benzo(a)anthracene | 18 U | 20 U | µg/Kg |
| Chrysene | 3.6 U | 4.1 U | µg/Kg |
| Benzo(b)fluoranthene | 3.6 U | 4.1 U | µg/Kg |
| Benzo(k)fluoranthene | 3.6 U | 4.1 U | µg/Kg |
| Benzo(a)pyrene | 3.6 U | 4.1 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.6 U | 4.1 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.6 U | 4.1 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.6 U | 4.1 U | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|-----------------------|-----------------------|----------------------|
| p-terphenyl | 116 | 121 | 39-141 |
| Date Prepared | 10/30/00 | 10/30/00 | |
| Date Analyzed | 10/30/00 | 10/30/00 | |

MISCELLANEOUS**METHOD**

| | | <u>TB 1-4'</u> | <u>TB 2-4'</u> | <u>Units</u> |
|----------------|---------|-----------------------|-----------------------|---------------------|
| Percent Solids | SM2540G | 92 | 81 | % |
| Date Analyzed | | 10/26/00 | 10/26/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX13950
DATE REPORTED: November 7, 2000
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>TB 1-4'</u> | <u>TB 2-4'</u> | <u>Units</u> |
|-----------------------|----------------|----------------|---------------|
| Hydrocarbons (C8-C40) | 7.2 U | 8.1 U | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 80 | 95 | 51-148 |
| Date Prepared | 10/26/00 | 10/26/00 | |
| Date Analyzed | 10/30/00 | 10/30/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED:** November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 8260 -
VOLATILE ORGANICS**

| | <u>TB 3-4'</u> | <u>TB 4-4'</u> | <u>Units</u> |
|--------------------------|-----------------------|-----------------------|----------------------|
| Methyl tert-butyl ether | 1.4 U D2 | 1.2 U D3 | µg/Kg |
| Benzene | 1.4 U D2 | 1.2 U D3 | µg/Kg |
| Toluene | 1.4 U D2 | 1.2 U D3 | µg/Kg |
| Ethylbenzene | 1.4 U D2 | 1.2 U D3 | µg/Kg |
| m-Xylene & p-Xylene | 2.6 U D2 | 2.6 U D3 | µg/Kg |
| o-Xylene | 1.4 U D2 | 1.2 U D3 | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Dibromofluoromethane | 112 | 113 | 69-138 |
| D8-Toluene | 137 | 138 | 67-123 |
| Bromofluorobenzene | 104 | 105 | 64-131 |
| Date Analyzed | 11/06/00 | 11/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

D2 = Analyte value determined from a 1:1.16 dilution.

D3 = Analyte value determined from a 1:1.13 dilution.

ENCO LABORATORIES

REPORT # : JAX13950
 DATE REPORTED: November 7, 2000
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>TB 3-4'</u> | <u>TB 4-4'</u> | <u>Units</u> |
|------------------------|----------------|----------------|---------------|
| Naphthalene | 19 U | 18 U | µg/Kg |
| Acenaphthylene | 38 U | 37 U | µg/Kg |
| 1-Methylnaphthalene | 38 U | 37 U | µg/Kg |
| 2-Methylnaphthalene | 38 U | 37 U | µg/Kg |
| Acenaphthene | 19 U | 18 U | µg/Kg |
| Fluorene | 3.8 U | 3.7 U | µg/Kg |
| Phenanthrene | 38 U | 37 U | µg/Kg |
| Anthracene | 19 U | 18 U | µg/Kg |
| Fluoranthene | 3.8 U | 15 | µg/Kg |
| Pyrene | 3.8 U | 14 | µg/Kg |
| Benzo(a)anthracene | 19 U | 18 U | µg/Kg |
| Chrysene | 3.8 U | 3.7 U | µg/Kg |
| Benzo(b)fluoranthene | 3.8 U | 3.7 U | µg/Kg |
| Benzo(k)fluoranthene | 3.8 U | 3.7 U | µg/Kg |
| Benzo(a)pyrene | 3.8 U | 3.7 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.8 U | 3.7 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.8 U | 3.7 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.8 U | 3.7 U | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-terphenyl | 120 | 118 | 39-141 |
| Date Prepared | 10/30/00 | 10/30/00 | |
| Date Analyzed | 10/30/00 | 10/30/00 | |

MISCELLANEOUS

METHOD

TB 3-4'

TB 4-4'

Units

| | | | | |
|----------------|---------|----------|----------|---|
| Percent Solids | SM2540G | 87 | 90 | % |
| Date Analyzed | | 10/26/00 | 10/26/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX13950
DATE REPORTED: November 7, 2000
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>TB 3-4'</u> | <u>TB 4-4'</u> | <u>Units</u> |
|-----------------------|----------------|----------------|---------------|
| Hydrocarbons (C8-C40) | 7.6 U | 7.3 U | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 72 | 83 | 51-148 |
| Date Prepared | 10/26/00 | 10/26/00 | |
| Date Analyzed | 10/30/00 | 10/30/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED**: November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 8260 -
VOLATILE ORGANICS**

| | <u>TB 5-3.5'</u> | <u>PB 1-4'</u> | <u>Units</u> |
|--------------------------|-------------------------|-----------------------|----------------------|
| Methyl tert-butyl ether | 1.3 U D4 | 130 U D5 | µg/Kg |
| Benzene | 1.3 U D4 | 130 U D5 | µg/Kg |
| Toluene | 1.3 U D4 | 130 U D5 | µg/Kg |
| Ethylbenzene | 1.3 U D4 | 130 U D5 | µg/Kg |
| m-Xylene & p-Xylene | 2.6 U D4 | 250 U D5 | µg/Kg |
| o-Xylene | 1.3 U D4 | 130 U D5 | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Dibromofluoromethane | 112 | 106 | 69-138 |
| D8-Toluene | 137 | 146 | 67-123 |
| Bromofluorobenzene | 105 | 105 | 64-131 |
| Date Analyzed | 11/06/00 | 11/02/00 | |

U = Compound was analyzed for but not detected to the level shown.

D4 = Analyte value determined from a 1:1.21 dilution.

D5 = Analyte value determined from a 1:100 dilution.

ENCO LABORATORIES

REPORT # : JAX13950
 DATE REPORTED: November 7, 2000
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
 PAH BY HPLC

| | <u>TB 5-3.5'</u> | <u>PB 1-4'</u> | <u>Units</u> |
|------------------------|------------------|----------------|--------------|
| Naphthalene | 18 U | 21 U | µg/Kg |
| Acenaphthylene | 35 U | 42 U | µg/Kg |
| 1-Methylnaphthalene | 35 U | 320 | µg/Kg |
| 2-Methylnaphthalene | 35 U | 100 | µg/Kg |
| Acenaphthene | 18 U | 21 U | µg/Kg |
| Fluorene | 3.5 U | 22 | µg/Kg |
| Phenanthrene | 35 U | 42 U | µg/Kg |
| Anthracene | 18 U | 21 U | µg/Kg |
| Fluoranthene | 3.5 U | 4.2 U | µg/Kg |
| Pyrene | 3.5 U | 69 | µg/Kg |
| Benzo(a)anthracene | 18 U | 21 U | µg/Kg |
| Chrysene | 3.5 U | 4.2 U | µg/Kg |
| Benzo(b)fluoranthene | 3.5 U | 4.2 U | µg/Kg |
| Benzo(k)fluoranthene | 3.5 U | 4.2 U | µg/Kg |
| Benzo(a)pyrene | 3.5 U | 4.2 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.5 U | 4.2 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.5 U | 4.2 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.5 U | 4.2 U | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| p-terphenyl | 117 | 125 | 39-141 |
| Date Prepared | 10/30/00 | 10/30/00 | |
| Date Analyzed | 10/30/00 | 10/31/00 | |

MISCELLANEOUS

| | <u>METHOD</u> | <u>TB 5-3.5'</u> | <u>PB 1-4'</u> | <u>Units</u> |
|----------------|---------------|------------------|----------------|--------------|
| Percent Solids | SM2540G | 93 | 79 | % |
| Date Analyzed | | 10/26/00 | 10/26/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX13950

DATE REPORTED: November 7, 2000

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

Hydrocarbons (C8-C40)

TB 5-3.5'

7.1 U

PB 1-4'

300

Units

mg/Kg

Surrogate:

o-Terphenyl

Date Prepared

Date Analyzed

% RECOV

77

10/26/00

10/30/00

% RECOV

78

10/26/00

10/30/00

LIMITS

51-148

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED**: November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 8260 -**
VOLATILE ORGANICS

| | <u>PB 2-2'</u> | <u>PB 3-3.5</u> | <u>Units</u> |
|-------------------------|----------------|-----------------|--------------|
| Methyl tert-butyl ether | 1.3 U D4 | 1.6 U D6 | µg/Kg |
| Benzene | 1.3 U D4 | 1.6 U D6 | µg/Kg |
| Toluene | 1.3 U D4 | 1.6 U D6 | µg/Kg |
| Ethylbenzene | 1.3 U D4 | 1.6 U D6 | µg/Kg |
| m-Xylene & p-Xylene | 2.6 U D4 | 3.2 U D6 | µg/Kg |
| o-Xylene | 1.3 U D4 | 1.6 U D6 | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------------|----------------|----------------|---------------|
| Dibromofluoromethane | 116 | 113 | 69-138 |
| D8-Toluene | 137 | 134 | 67-123 |
| Bromofluorobenzene | 106 | 106 | 64-131 |
| Date Analyzed | 11/06/00 | 11/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

D4 = Analyte value determined from a 1:1.21 dilution.

D6 = Analyte value determined from a 1:1.18 dilution.

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED:** November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 8310 -
PAH BY HPLC**

| | <u>PB 2-2'</u> | <u>PB 3-3.5</u> | <u>Units</u> |
|--------------------------|-----------------------|-----------------------|----------------------|
| Naphthalene | 18 U | 22 U | µg/Kg |
| Acenaphthylene | 36 U | 44 U | µg/Kg |
| 1-Methylnaphthalene | 36 U | 44 U | µg/Kg |
| 2-Methylnaphthalene | 36 U | 44 U | µg/Kg |
| Acenaphthene | 18 U | 22 U | µg/Kg |
| Fluorene | 47 | 4.4 U | µg/Kg |
| Phenanthrene | 130 | 44 U | µg/Kg |
| Anthracene | 330 | 22 U | µg/Kg |
| Fluoranthene | 140 | 15 | µg/Kg |
| Pyrene | 110 | 11 | µg/Kg |
| Benzo(a)anthracene | 68 | 22 U | µg/Kg |
| Chrysene | 63 | 8.5 | µg/Kg |
| Benzo(b)fluoranthene | 29 | 4.4 U | µg/Kg |
| Benzo(k)fluoranthene | 23 | 4.4 U | µg/Kg |
| Benzo(a)pyrene | 32 | 4.4 U | µg/Kg |
| Dibenzo(a,h)anthracene | 15 | 4.4 U | µg/Kg |
| Benzo(g,h,i)perylene | 31 | 4.4 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 27 | 4.4 U | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-terphenyl | 120 | 106 | 39-141 |
| Date Prepared | 10/30/00 | 10/30/00 | |
| Date Analyzed | 10/31/00 | 10/31/00 | |

| <u>MISCELLANEOUS</u> | <u>METHOD</u> | <u>PB 2-2'</u> | <u>PB 3-3.5</u> | <u>Units</u> |
|----------------------|---------------|----------------|-----------------|--------------|
| Percent Solids | SM2540G | 91 | 74 | % |
| Date Analyzed | | 10/26/00 | 10/26/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX13950
DATE REPORTED: November 7, 2000
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>PB 2-2'</u> | <u>PB 3-3.5</u> | <u>Units</u> |
|-----------------------|----------------|-----------------|---------------|
| Hydrocarbons (C8-C40) | 7.2 U | 8.9 U | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 82 | 94 | 51-148 |
| Date Prepared | 10/26/00 | 10/26/00 | |
| Date Analyzed | 10/30/00 | 10/30/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED:** November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 8260 -**
VOLATILE ORGANICS

| | <u>PB 4-4'</u> | <u>PB 5-4'</u> | <u>Units</u> |
|-------------------------|----------------|----------------|--------------|
| Methyl tert-butyl ether | 1.0 U D7 | 1.2 U D8 | µg/Kg |
| Benzene | 1.0 U D7 | 1.2 U D8 | µg/Kg |
| Toluene | 1.0 U D7 | 1.2 U D8 | µg/Kg |
| Ethylbenzene | 1.0 U D7 | 1.2 U D8 | µg/Kg |
| m-Xylene & p-Xylene | 3.1 U D7 | 2.4 U D8 | µg/Kg |
| o-Xylene | 1.0 U D7 | 1.2 U D8 | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------------|----------------|----------------|---------------|
| Dibromofluoromethane | 113 | 114 | 69-138 |
| D8-Toluene | 136 | 137 | 67-123 |
| Bromofluorobenzene | 106 | 103 | 64-131 |
| Date Analyzed | 11/06/00 | 11/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

D7 = Analyte value determined from a 1:1.04 dilution.

D8 = Analyte value determined from a 1:1.12 dilution.

ENCO LABORATORIES

REPORT # : JAX13950
DATE REPORTED: November 7, 2000
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

**EPA METHOD 8310 -
PAH BY HPLC**

| | <u>PB 4-4'</u> | <u>PB 5-4'</u> | <u>Units</u> |
|------------------------|----------------|----------------|--------------|
| Naphthalene | 24 U | 18 U | µg/Kg |
| Acenaphthylene | 48 U | 37 U | µg/Kg |
| 1-Methylnaphthalene | 48 U | 37 U | µg/Kg |
| 2-Methylnaphthalene | 48 U | 37 U | µg/Kg |
| Acenaphthene | 24 U | 18 U | µg/Kg |
| Fluorene | 4.8 U | 3.7 U | µg/Kg |
| Phenanthrene | 48 U | 140 | µg/Kg |
| Anthracene | 140 | 18 U | µg/Kg |
| Fluoranthene | 66 | 370 | µg/Kg |
| Pyrene | 59 | 360 | µg/Kg |
| Benzo(a)anthracene | 27 | 180 | µg/Kg |
| Chrysene | 24 | 160 | µg/Kg |
| Benzo(b)fluoranthene | 11 | 150 | µg/Kg |
| Benzo(k)fluoranthene | 7.0 | 49 | µg/Kg |
| Benzo(a)pyrene | 8.2 | 71 | µg/Kg |
| Dibenzo(a,h)anthracene | 4.8 U | 21 | µg/Kg |
| Benzo(g,h,i)perylene | 7.5 | 44 | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 5.7 | 80 | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| p-terphenyl | 115 | 120 | 39-141 |
| Date Prepared | 10/30/00 | 10/30/00 | |
| Date Analyzed | 10/31/00 | 10/31/00 | |

MISCELLANEOUS

METHOD

PB 4-4'

PB 5-4'

Units

| | | | | |
|----------------|---------|----------|----------|---|
| Percent Solids | SM2540G | 68 | 90 | % |
| Date Analyzed | | 10/26/00 | 10/26/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX13950

DATE REPORTED: November 7, 2000

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>PB 4-4'</u> | <u>PB 5-4'</u> | <u>Units</u> |
|-----------------------|----------------|----------------|---------------|
| Hydrocarbons (C8-C40) | 9.7 U | 44 | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 91 | 104 | 51-148 |
| Date Prepared | 10/26/00 | 10/26/00 | |
| Date Analyzed | 10/30/00 | 10/30/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED**: November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 8260 -**
VOLATILE ORGANICS

| | <u>PB 6-4'</u> | <u>PB 7-4'</u> | <u>Units</u> |
|-------------------------|----------------|----------------|--------------|
| Methyl tert-butyl ether | 1.2 U D6 | 110 U D5 | µg/Kg |
| Benzene | 1.2 U D6 | 110 U D5 | µg/Kg |
| Toluene | 1.2 U D6 | 110 U D5 | µg/Kg |
| Ethylbenzene | 1.2 U D6 | 110 U D5 | µg/Kg |
| m-Xylene & p-Xylene | 2.5 U D6 | 220 U D5 | µg/Kg |
| o-Xylene | 1.2 U D6 | 110 U D5 | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------------|----------------|----------------|---------------|
| Dibromofluoromethane | 112 | 105 | 69-138 |
| D8-Toluene | 140 | 145 | 67-123 |
| Bromofluorobenzene | 108 | 108 | 64-131 |
| Date Analyzed | 11/06/00 | 11/02/00 | |

U = Compound was analyzed for but not detected to the level shown.

D5 = Analyte value determined from a 1:100 dilution.

D6 = Analyte value determined from a 1:1.18 dilution.

ENCO LABORATORIES

REPORT # : JAX13950
DATE REPORTED: November 7, 2000
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

**EPA METHOD 8310 -
PAH BY HPLC**

| | <u>PB 6-4'</u> | <u>PB 7-4'</u> | <u>Units</u> |
|------------------------|----------------|----------------|--------------|
| Naphthalene | 17 U | 3100 D9 | µg/Kg |
| Acenaphthylene | 34 U | 360 U D9 | µg/Kg |
| 1-Methylnaphthalene | 34 U | 8800 D9 | µg/Kg |
| 2-Methylnaphthalene | 34 U | 13000 D9 | µg/Kg |
| Acenaphthene | 17 U | 410 D9 | µg/Kg |
| Fluorene | 3.4 U | 320 D9 | µg/Kg |
| Phenanthrene | 34 U | 360 U D9 | µg/Kg |
| Anthracene | 17 U | 180 U D9 | µg/Kg |
| Fluoranthene | 3.4 U | 2000 D9 | µg/Kg |
| Pyrene | 3.4 U | 1200 D9 | µg/Kg |
| Benzo(a)anthracene | 17 U | 340 D9 | µg/Kg |
| Chrysene | 3.4 U | 220 D9 | µg/Kg |
| Benzo(b)fluoranthene | 3.4 U | 110 D9 | µg/Kg |
| Benzo(k)fluoranthene | 3.4 U | 82 D9 | µg/Kg |
| Benzo(a)pyrene | 3.4 U | 110 D9 | µg/Kg |
| Dibenzo(a,h)anthracene | 3.4 U | 35 U D9 | µg/Kg |
| Benzo(g,h,i)perylene | 3.4 U | 54 D9 | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.4 U | 76 D9 | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| p-terphenyl | 121 | 0 U | 39-141 |
| Date Prepared | 10/30/00 | 10/30/00 | |
| Date Analyzed | 10/31/00 | 10/31/00 | |

MISCELLANEOUS

| | <u>METHOD</u> | <u>PB 6-4'</u> | <u>PB 7-4'</u> | <u>Units</u> |
|----------------|---------------|----------------|----------------|--------------|
| Percent Solids | SM2540G | 96 | 93 | % |
| Date Analyzed | | 10/26/00 | 10/26/00 | |

U = Compound was analyzed for but not detected to the level shown.
D9 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED:** November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD FLPRO -**
PETROL. RESIDUAL ORG.

Hydrocarbons (C8-C40)

PB 6-4'

6.9 U

PB 7-4'

5600 D9

Units

mg/Kg

Surrogate:

o-Terphenyl

Date Prepared

Date Analyzed

% RECOV

91

10/26/00

10/30/00

% RECOV

0 U

10/26/00

10/31/00

LIMITS

51-148

U = Compound was analyzed for but not detected to the level shown.

D9 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED**: November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure**PAGE 20 OF 26****RESULTS OF ANALYSIS****EPA METHOD 8260 -
VOLATILE ORGANICS**

| | <u>PB 8-2'</u> | <u>LAB BLANK</u> | <u>Units</u> |
|-------------------------|----------------|------------------|--------------|
| Methyl tert-butyl ether | 1.0 U D10 | 100 U D5 | µg/Kg |
| Benzene | 1.0 U D10 | 100 U D5 | µg/Kg |
| Toluene | 1.0 U D10 | 100 U D5 | µg/Kg |
| Ethylbenzene | 1.0 U D10 | 100 U D5 | µg/Kg |
| m-Xylene & p-Xylene | 2.8 U D10 | 200 U D5 | µg/Kg |
| o-Xylene | 1.0 U D10 | 100 U D5 | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------------|----------------|----------------|---------------|
| Dibromofluoromethane | 122 | 106 | 69-138 |
| D8-Toluene | 129 | 139 | 67-123 |
| Bromofluorobenzene | 123 | 107 | 64-131 |
| Date Analyzed | 11/06/00 | 11/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

D5 = Analyte value determined from a 1:100 dilution.

D10 = Analyte value determined from a 1:1.03 dilution.

ENCO LABORATORIES

REPORT # : JAX13950

DATE REPORTED: November 7, 2000

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>PB 8-2'</u> | <u>LAB BLANK</u> | <u>Units</u> |
|------------------------|----------------|------------------|--------------|
| Naphthalene | .160 | 16 U | µg/Kg |
| Acenaphthylene | 44 U | 33 U | µg/Kg |
| 1-Methylnaphthalene | 2200 | 33 U | µg/Kg |
| 2-Methylnaphthalene | 1400 | 33 U | µg/Kg |
| Acenaphthene | 1000 | 16 U | µg/Kg |
| Fluorene | .890 | 3.3 U | µg/Kg |
| Phenanthrene | 5500 D9 | 33 U | µg/Kg |
| Anthracene | 7000 D9 | 16 U | µg/Kg |
| Fluoranthene | 5000 D9 | 3.3 U | µg/Kg |
| Pyrene | 4500 D9 | 3.3 U | µg/Kg |
| Benzo(a)anthracene | 1100 | 16 U | µg/Kg |
| Chrysene | .820 | 3.3 U | µg/Kg |
| Benzo(b)fluoranthene | .250 | 3.3 U | µg/Kg |
| Benzo(k)fluoranthene | .190 | 3.3 U | µg/Kg |
| Benzo(a)pyrene | .300 | 3.3 U | µg/Kg |
| Dibenzo(a,h)anthracene | .60 | 3.3 U | µg/Kg |
| Benzo(g,h,i)perylene | .73 | 3.3 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | .140 | 3.3 U | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| p-terphenyl | 0 U | 112 | 39-141 |
| Date Prepared | 10/30/00 | 10/30/00 | |
| Date Analyzed | 10/31/00 | 10/30/00 | |

MISCELLANEOUS

| | <u>METHOD</u> | <u>PB 8-2'</u> | <u>LAB BLANK</u> | <u>Units</u> |
|----------------|---------------|----------------|------------------|--------------|
| Percent Solids | SM2540G | 74 | NA | % |
| Date Analyzed | | 10/26/00 | | |

U = Compound was analyzed for but not detected to the level shown.

D9 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED**: November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure**PAGE 22 OF 26****RESULTS OF ANALYSIS****EPA METHOD FLPRO -**
PETROL. RESIDUAL ORG.

| | <u>PB 8-2'</u> | <u>LAB BLANK</u> | <u>Units</u> |
|--------------------------|-----------------------|-------------------------|----------------------|
| Hydrocarbons (C8-C40) | 1800 D9 | 6.6 U | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | * | 91 | 51-148 |
| Date Prepared | 10/26/00 | 10/26/00 | |
| Date Analyzed | 10/31/00 | 10/30/00 | |

* = MS/MSD/RPD unavailable due to high original sample concentration.

U = Compound was analyzed for but not detected to the level shown.

D9 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED**: November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 8260 -**
VOLATILE ORGANICS

| | <u>LAB</u> <u>BLANK</u> | <u>LAB</u> <u>BLANK</u> | <u>Units</u> |
|-------------------------|-------------------------|-------------------------|--------------|
| Methyl tert-butyl ether | 1.0 U | 1.0 U | µg/Kg |
| Benzene | 1.0 U | 1.0 U | µg/Kg |
| Toluene | 1.0 U | 1.0 U | µg/Kg |
| Ethylbenzene | 1.0 U | 1.0 U | µg/Kg |
| m-Xylene & p-Xylene | 2.0 U | 2.0 U | µg/Kg |
| o-Xylene | 1.0 U | 1.0 U | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------------|----------------|----------------|---------------|
| Dibromofluoromethane | 112 | 108 | 69-138 |
| D8-Toluene | 158 | 132 | 67-123 |
| Bromofluorobenzene | 107 | 100 | 64-131 |
| Date Analyzed | 11/06/00 | 11/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED**: November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure**PAGE 24 OF 26****RESULTS OF ANALYSIS****EPA METHOD 8310 -
PAH BY HPLC****LAB BLANK****Units**

| | | |
|------------------------|-------|-------|
| Naphthalene | 16 U | µg/Kg |
| Acenaphthylene | 33 U | µg/Kg |
| 1-Methylnaphthalene | 33 U | µg/Kg |
| 2-Methylnaphthalene | 33 U | µg/Kg |
| Acenaphthene | 16 U | µg/Kg |
| Fluorene | 3.3 U | µg/Kg |
| Phenanthrene | 33 U | µg/Kg |
| Anthracene | 16 U | µg/Kg |
| Fluoranthene | 3.3 U | µg/Kg |
| Pyrene | 3.3 U | µg/Kg |
| Benzo(a)anthracene | 16 U | µg/Kg |
| Chrysene | 3.3 U | µg/Kg |
| Benzo(b)fluoranthene | 3.3 U | µg/Kg |
| Benzo(k)fluoranthene | 3.3 U | µg/Kg |
| Benzo(a)pyrene | 3.3 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.3 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.3 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.3 U | µg/Kg |

Surrogate:**% RECOV****LIMITS**

p-terphenyl

116

39-141

Date Prepared

10/31/00

Date Analyzed

10/31/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX13950
DATE REPORTED: November 7, 2000
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 8260</u> | | | | |
| 1,1-Dichloroethene | 111/114/126 | 44-169 | 3 | 19 |
| Benzene | 98/ 99/106 | 50-140 | 1 | 23 |
| Trichloroethene | 92/ 90/ 98 | 75-125 | 2 | 17 |
| Toluene | 103/104/109 | 56-139 | <1 | 22 |
| Chlorobenzene | 96/ 96/103 | 73-123 | <1 | 24 |
| <u>EPA Method 8260</u> | | | | |
| 1,1-Dichloroethene | 126/144/152 | 44-169 | 13 | 19 |
| Benzene | 99/117/115 | 50-140 | 17 | 23 |
| Trichloroethene | 82/ 95/ 98 | 75-125 | 15 | 17 |
| Toluene | 84/102/103 | 56-139 | 19 | 22 |
| Chlorobenzene | 89/102/101 | 73-123 | 14 | 24 |
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 84/ 80/ 76 | 48-130 | 5 | 20 |
| Acenaphthene | 97/108/ 97 | 36-127 | 11 | 17 |
| Benzo(a)pyrene | 89/ 87/ 74 | 64-141 | 2 | 22 |
| Benzo(g,h,i)perylene | 104/100/102 | 58-168 | 4 | 21 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

ENCO LABORATORIES**REPORT #** : JAX13950**DATE REPORTED**: November 7, 2000**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

PAGE 26 OF 26

QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|----------------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 84/ 80/ 89 | 48-130 | 5 | 20 |
| Acenaphthene | 97/108/108 | 36-127 | 11 | 17 |
| Benzo(a)pyrene | 89/ 87/ 72 | 64-141 | 2 | 22 |
| Benzo(g,h,i)perylene | 104/100/103 | 58-168 | 4 | 21 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 89/ 88/ 82 | 62-204 | 1 | 25 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

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MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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**LIMITED TANK CLOSURE REPORT
ABOVEGROUND STORAGE TANK NO. 202
RELIABLE MECHANICAL JOB
MAYPORT NAVAL STATION
MAYPORT, FLORIDA**



**LIMITED TANK CLOSURE REPORT
ABOVEGROUND STORAGE TANK NO. 202
RELIABLE MECHANICAL JOB
MAYPORT NAVAL STATION
MAYPORT, FLORIDA**

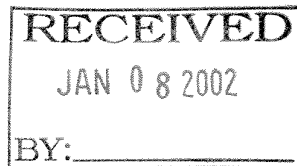
PREPARED FOR:


Environmental Recovery Group, Inc.
251 Levy Road
Atlantic Beach, Florida 32233-0569
ERG Job Number 2828

PREPARED BY:


Aerostar Environmental Services, Inc.
11200 St. Johns Industrial Parkway, Suite 1
Jacksonville, Florida 32246
(904) 565-2820

ROICC JAX AREA
02 APR 23 PM 1:58




Richard D. McCann, Project Manager

3/5/01
Date


Leon J. Carrero, P.G.; Manager, Environmental Services

3/5/01
Date

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1.0 INTRODUCTION

Aerostar Environmental Services, Inc. (AEROSTAR) provided environmental services during closure of an aboveground storage tank (AST) system (hereafter referred to as Tank #202), located at the Mayport Naval Station, Mayport, Duval County, Florida, Florida Department of Environmental Protection (FDEP ID) #168626008; hereafter referred to as the site. According to Navy records, the AST stored JP-5 to fuel aircraft carriers stationed at Mayport Naval Station. A topographic map showing the location of the site is included as Figure 1. Demolition and AST closure activities were managed by Reliable Mechanical, Inc. (RMI) of Louisville, Kentucky; the prime contractor on the MILCON project. Environmental assessment activities were conducted by AEROSTAR personnel in accordance with the guidelines established in the Storage Tank System Closure Assessment Requirements and following closure specifications provided by RMI. Based on the results of this investigation, further assessment is recommended for the area of the former AST system. The following sections present the AST system location and description, closure procedures and results of the environmental monitoring activities.

2.0 STORAGE TANK REMOVAL PROCEDURES

The former AST system was located approximately 200 feet south of the St. Johns River on the Mayport Naval Station, and consisted of a 598,000-gallon steel tank containing JP-5 jet fuel. The AST was constructed of welded steel sheets and placed on a one-foot thick round concrete pad, approximately 88 feet in diameter. Information obtained by AEROSTAR from the Navy indicated that the AST was installed in 1960. A site plan showing the location of the former AST system is included as Figure 2.

The AST system was removed between January 12 and January 13, 2001 by Realco Recycling and Wrecking Company, a subcontractor to RMI. Prior to demolition, the remaining contents of Tank #202 were transferred to another tank located at the site. The interior of the tank was cleaned by Environmental Recovery Group, Inc. (ERG). The rinse water was transported by Waste Reduction Systems, Inc. (WRS) to Industrial Water Services (IWS) in Jacksonville, Florida for proper disposal. The steel roof and walls of the tank were demolished and properly disposed of, leaving only the steel tank bottom (approximately 0.5-inches thick) and the one-foot thick concrete pad. Copies of the

Limited Closure Summary Report and the Storage Tank Facility Registration Form are included in Appendices A and B, respectively. Photographic documentation of the site conditions during soil and groundwater sampling activities is included in Appendix C.

3.0 ENVIRONMENTAL MONITORING ACTIVITIES

On January 17, 2001, soil borings PB-1 through PB-8 were advanced around the perimeter of the former AST. On January 18, 2001, soil borings TB-1 through TB-5 were advanced through the concrete pad to further evaluate soil quality. Soil samples were collected during boring advancement at one-foot intervals from approximately one foot below land surface (BLS) to approximately five feet BLS using a three-inch diameter, stainless steel hand auger. The soil samples were screened with a calibrated portable Heath Tech Porta-FID III™ Organic Vapor Analyzer with a Flame Ionization Detector (OVA-FID). Each sample was also screened with a charcoal filter to differentiate the instrument's response to naturally occurring methane vapors. The difference between the readings is the vapor concentration attributed to petroleum hydrocarbons. In addition to the OVA-FID screening, each sample was inspected for signs of hydrocarbon staining and unusual odors. Soil sample collection and screening activities were conducted in accordance with AEROSTAR's FDEP-approved Comprehensive Quality Assurance Project Plan (CQAPP) #940023G.

Hydrocarbon vapors were detected above the State target level of 10 parts per million (ppm), established as a "positive field screening result" in Chapter 62-770, Florida Administrative Code (FAC). Maximum vapor concentrations detected in soil samples collected from the vadose zone ranged from 1260 ppm to 3600 ppm. Results of the soil vapor screening are included in Table 1. The soil sample locations are shown in Figure 2.

Soil samples exhibiting the highest OVA responses from each borehole were collected for laboratory analyses. The samples were submitted to Environmental Conservation Laboratories, Inc. (Enco) in Jacksonville, Florida for analyses of the parameters listed in EPA Method 5035/8021A for Volatile Organic Aromatics (VOAs), EPA Method 8310 for Polynuclear Aromatic Hydrocarbons (PAHs), and Total Recoverable Petroleum Hydrocarbons (TRPHs) by the FL-PRO Method. Soil sampling

activities were conducted in accordance with AEROSTAR's FDEP-approved CQAPP #940023G.

Volatile and semi-volatile organic compounds and TRPH constituents were detected above State cleanup target levels in soil samples collected from the area of the former AST. Soil analytical results are summarized in Table 2. The laboratory analytical reports are included in Appendix D.

On January 17 and 18, 2001, thirteen temporary wells (PB-1 through PB-8 and TB-1 through TB-5) were installed at the locations of the soil borings, as shown in Figure 2. The temporary wells were installed approximately eight feet BLS using a three-inch diameter, stainless steel hand auger. The water table surface was encountered at approximately 5.5 feet BLS during the assessment activities. Groundwater samples were collected from the temporary wells for analyses of the parameters listed in EPA Method 601 for volatile organic hydrocarbons (VOHs), EPA Method 602 for VOAs, EPA Method 610 for PAHs, EPA Method 504 for ethylene dibromide, TRPH by the FL-PRO Method, and EPA Method 200.7 for total lead. The samples were collected using disposable bailers after purging each well of five well volumes to ensure representative samples of actual aquifer conditions. The samples to be analyzed for total lead were collected by the quiescent sampling method using an adjustable-flow peristaltic pump to minimize sample turbidity. Groundwater sampling activities were conducted in accordance with AEROSTAR's FDEP-approved CQAPP #940023G.

Results of the groundwater analyses showed hydrocarbons concentrations above State cleanup target levels in the samples collected in the area of the AST. Groundwater analytical results with corresponding State target levels are summarized in Table 3. Laboratory analytical reports are included in Appendix D.

4.0 RECOMMENDATIONS

Petroleum hydrocarbon concentrations were detected above the State target levels established in Chapter 62-777, FAC, in the groundwater and soil samples collected for this investigation. Based on the results of the tank closure, further assessment activities are recommended for the area of the former AST system.

TABLES

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Mayport AST Closure /Tank #202

Facility ID No: 168626008

| SAMPLE | | | | OVA SCREENING RESULTS | | | |
|------------|----------------|----------------|------------------------|-----------------------|-----------------------|-------------------|--|
| BORING NO. | DATE COLLECTED | DEPTH TO WATER | SAMPLE INTERVAL (FBLs) | TOTAL READING (ppm) | CARBON FILTERED (ppm) | NET READING (ppm) | COMMENTS |
| TB-1 | 1/18/01 | -5.5 | 1 | NA | NA | NA | TB-1 = Tank Bottom Sampling Location 1 |
| | | | 2 | 1325 | 15 | 1310 | |
| | | | 3 | 2350 | 10 | 2340 | |
| | | | 4 | 2525 | 0 | 2525 | |
| | | | 5 | 2175 | 0 | 2175 | |
| TB-2 | 1/18/01 | -5.5 | 1 | NA | NA | NA | Concrete Bottom ~12-in. Thick |
| | | | 2 | 1900 | 40 | 1860 | |
| | | | 3 | 1200 | 70 | 1130 | |
| | | | 4 | 1550 | 45 | 1505 | |
| | | | 5 | 500 | 60 | 440 | |
| TB-3 | 1/18/01 | -5.5 | 1 | NA | NA | NA | Concrete Bottom ~12-in. Thick |
| | | | 2 | 3500 | 0 | 3500 | |
| | | | 3 | 1700 | 0 | 1700 | |
| | | | 4 | 2800 | 0 | 2800 | |
| | | | 5 | 3600 | 0 | 3600 | |
| TB-4 | 1/18/01 | -5.5 | 1 | NA | NA | NA | Concrete Bottom ~12-in. Thick |
| | | | 2 | 1600 | 5 | 1595 | |
| | | | 3 | 2000 | 0 | 2000 | |
| | | | 4 | 1250 | 0 | 1250 | |
| | | | 5 | 1200 | 0 | 1200 | |
| TB-5 | 1/18/01 | -5.5 | 1 | NA | NA | NA | Concrete Bottom ~12-in. Thick |
| | | | 2 | 1150 | 12 | 1138 | |
| | | | 3 | 2400 | 8 | 2392 | |
| | | | 4 | 2800 | 0 | 2800 | |
| | | | 5 | 2300 | 0 | 2300 | |
| PB-1 | 1/17/01 | -6.5 | 1 | 7 | 0 | 7 | PB-1 = Perimeter Boring 1 |
| | | | 2 | 180 | 0 | 180 | |
| | | | 3 | 110 | 0 | 110 | |
| | | | 4 | 240 | 0 | 240 | |
| | | | 5 | 230 | 0 | 230 | |
| | | | 6 | 145 | 0 | 145 | |
| PB-2 | 1/17/01 | -5.5 | 1 | 110 | 0 | 110 | |
| | | | 2 | 220 | 0 | 220 | |
| | | | 3 | 260 | 0 | 260 | |
| | | | 4 | 220 | 0 | 220 | |
| | | | 5 | 290 | 0 | 290 | |
| PB-3 | 1/17/01 | -5.5 | 1 | 180 | 2 | 178 | |
| | | | 2 | 360 | 36 | 324 | |
| | | | 3 | 1300 | 38 | 1262 | |
| | | | 4 | 1850 | 150 | 1700 | |
| | | | 5 | 1400 | 140 | 1260 | |
| PB-4 | 1/17/01 | -5.5 | 1 | 60 | 0 | 60 | |
| | | | 2 | 40 | 0 | 40 | |
| | | | 3 | 35 | 0 | 35 | |
| | | | 4 | 40 | 0 | 40 | |
| | | | 5 | 280 | 0 | 280 | |
| PB-5 | 1/17/01 | -5.5 | 1 | 6 | 0 | 6 | |
| | | | 2 | 2 | 0 | 2 | |
| | | | 3 | 1 | 0 | 1 | |
| | | | 4 | 2 | 0 | 2 | |
| | | | 5 | 35 | 0 | 35 | |
| PB-6 | 1/17/01 | -5.5 | 1 | 2 | 0 | 2 | |
| | | | 2 | 0 | 0 | 0 | |
| | | | 3 | 0 | 0 | 0 | |
| | | | 4 | 0 | 0 | 0 | |
| | | | 5 | 0 | 0 | 0 | |
| PB-7 | 1/17/01 | -5.5 | 1 | 8 | 0 | 8 | |
| | | | 2 | 200 | 5 | 195 | |
| | | | 3 | 250 | 3 | 247 | |
| | | | 4 | 750 | 8 | 742 | |
| | | | 5 | 1400 | 22 | 1378 | |
| PB-8 | 1/17/01 | -5.5 | 1 | 0 | 0 | 0 | |
| | | | 2 | 0 | 0 | 0 | |
| | | | 3 | 0 | 0 | 0 | |
| | | | 4 | 24 | 0 | 24 | |
| | | | 5 | 0 | 0 | 0 | |

TABLE 3: GROUNDWATER LABORATORY ANALYTICAL SUMMARY

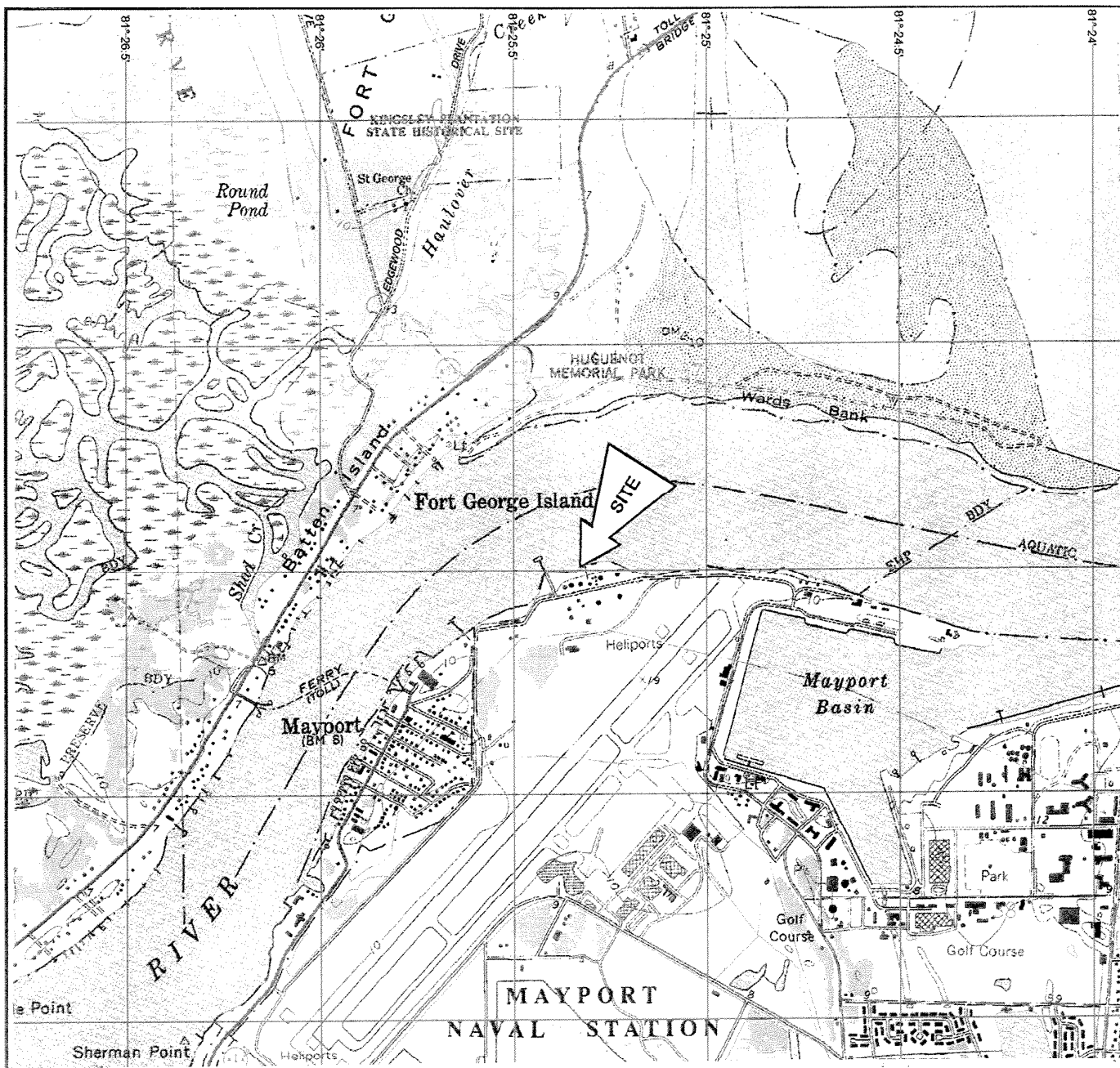
Facility Name: Mayport Tank Closure/Tank #202

Facility ID No: 168626008

Not Analyzed = NA
All results in micrograms per liter (ug/L)

| Sample Location | Date | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | Naphthalene | 1-Methyl naphthalene | 2-Methyl naphthalene | Fluorene | Fluoranthene | Pyrene | Lead | EDB | TRPH | Comments |
|-----------------|----------|---------|---------|---------------|---------------|-------|-------------|----------------------|----------------------|----------|--------------|--------|------|--------|-------|-------------------|
| | | 1 | 40 | 30 | 20 | 50 | 20 | 20 | 20 | 280 | 280 | 210 | 15 | 0.02 | ppm | |
| TB-1 | 01/13/01 | <500 | <500 | <500 | <1000 | <1000 | <0.50 | 860 | 1300 | <0.10 | 12 | 7.2 | 6 | <0.020 | 190 | Dil. X 50 |
| TB-2 | 01/13/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | 0.65 | 5.0 | 6.9 | <0.10 | 0.3 | 0.27 | 10 | <0.020 | <0.20 | |
| TB-3 | 01/13/01 | <500 | <500 | <500 | <1000 | <1000 | <0.50 | 820 | 1200 | <0.10 | 5.9 | 6.4 | <5.0 | <0.020 | 160 | Dil. X 500/50 |
| TB-4 | 01/13/01 | <5.0 | <5.0 | <5.0 | <10 | <10 | 40 | 190 | 240 | <0.10 | 3.8 | 2.2 | <5.0 | <0.020 | 9.9 | Dil. X 10/5 |
| TB-5 | 01/13/01 | <10 | <10 | <10 | <20 | <20 | <50 | 4800 | 7200 | <10 | 280 | 89 | <5.0 | <0.020 | 430 | Dil. X 100/50/10 |
| PB-1 | 01/13/01 | <50 | <50 | <50 | <10 | <10 | <0.50 | 76 | 31 | <0.10 | 1.8 | 1.5 | <5.0 | <0.020 | 4.2 | Dil. X 10/5 |
| PB-2 | 01/13/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <0.50 | 51 | <1.0 | <0.10 | 2.8 | 2.4 | <5.0 | <0.020 | 4.7 | |
| PB-3 | 01/13/01 | <1000 | <1000 | <1000 | <2000 | <2000 | 1.1 | 740 | 870 | <0.10 | 17 | 16 | <5.0 | <0.020 | 94 | Dil. X 1000/50/10 |
| PB-4 | 01/13/01 | <500 | <500 | <500 | <1000 | <1000 | 220 | 580 | 640 | <0.10 | 2.4 | 8.3 | <5.0 | <0.020 | 66 | Dil. X 500/50/10 |
| PB-5 | 01/13/01 | <10 | <10 | <10 | <20 | <20 | 4.0 | 130 | 17 | <0.10 | 0.29 | 0.58 | <5.0 | <0.020 | 5.7 | Dil. X 10 |
| PB-6 | 01/13/01 | <50 | <50 | <50 | <10 | <10 | 5.8 | 45 | <1.0 | <0.10 | <0.10 | <0.10 | <5.0 | <0.020 | 1.8 | Dil. X 5 |
| PB-7 | 01/13/01 | <500 | <500 | <500 | <1000 | <1000 | 96 | 390 | 530 | <0.10 | 20 | 5.8 | <5.0 | <0.020 | 130 | Dil. X 500/50/20 |
| PB-8 | 01/13/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <0.50 | <1.0 | <1.0 | <0.10 | 0.19 | 0.14 | <5.0 | <0.020 | <0.20 | |

FIGURES



MAYPORT QUADRANGLE

30081-B5-TF-024

PHOTOREVISED 1982

DMA 4744 IV NW-SERIES V847

7.5 MINUTE SERIES
(TOPOGRAPHIC)

CONTOUR INTERVAL 10 FEET



NATIONAL GEODETIC VERTICAL DATUM OF 1929

FIGURE 1 TOPOGRAPHIC SITE LOCATION MAP

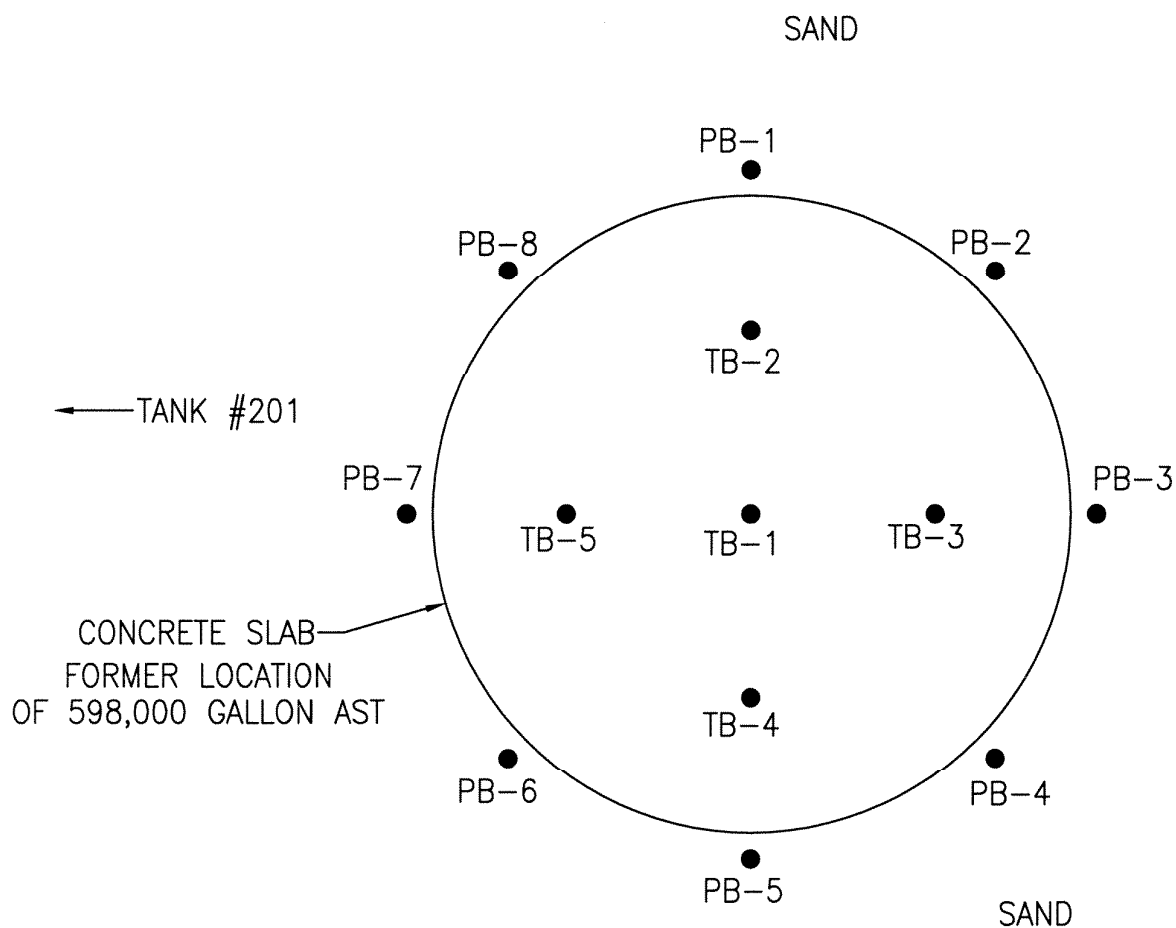


MAYPORT TANK CLOSURE #202
MAYPORT NAVAL STATION

DRAWN BY: JJR

REFERENCE: MAP OF
MAYPORT, FLORIDA
PREPARED BY: U. S.
GEOLOGICAL SURVEY

ST. JOHNS RIVER



LEGEND

- PERIMETER BORING LOCATION
PB-5
- TANK BOTTOM BORING LOCATION
TB-1

JOB #01-009-06

FIGURE 2. SITE PLAN & SAMPLING LOCATIONS



MAYPORT AST CLOSURE/TANK #202
MAYPORT NAVAL AIR STATION
JACKSONVILLE, FLORIDA

DRAWN BY: KJS

DATE: 02/25/01

APPENDIX A
LIMITED CLOSURE SUMMARY REPORT



Department of Environmental Protection

1 Towers Office Building ♦ 2600 Blair Stone Road ♦ Tallahassee, Florida 32399-2400

DEP Form 62-761.900(8)
Form Title: Limited Closure
Summary Report:
Effective Date: July 13, 1998

Limited Closure Summary Report

This form is required for facilities that have sites with documented contamination requiring a site assessment in accordance with Chapter 62-770, F.A.C. This includes those facilities that are eligible for the Early Detection Incentive Program (EDI), the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP), and the Petroleum Cleanup Participation Program (PCPP), pursuant to Sections 376.3071 and 376.3072, F.S. Documentation of procedures followed, and results obtained during closure shall be reported in this form, along with any attachments. This form shall be submitted to the County within 60 days of completion of the closure in accordance with Section A of the "Storage Tank System Closure Assessment Requirements."

Complete All Applicable Blanks. Please Print or Type

General Information

| | | |
|--|--|---------------------------------|
| Date: <u>02/23/01</u> | FDEP Facility ID Number: <u>68626008</u> | County: <u>DUVAL</u> |
| Facility Name <u>MAYPORT NAVAL STATION</u> | | Facility Telephone #: () |
| Facility Address: | | |
| Owner or Operator Name: | | Owner/Operator phone #: () |
| Mailing Address: | | |

Storage Tank System Closure Information

1. Were the storage tanks(s): (Check one or both)

| | |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Aboveground | <input type="checkbox"/> Underground |
|---|--------------------------------------|

2. General System Information

| | | |
|--|---------------------------------|----------------------------------|
| Types of Products Stored: <u>JP-5 JET FUEL</u> | Number of Tanks: <u>ONE (1)</u> | Age(s) of Tanks: <u>~40</u> yrs. |
|--|---------------------------------|----------------------------------|

3. Was the Limited Closure Summary Report Performed as a Result of: (check one or more)

| | | |
|---|--|--|
| <input checked="" type="checkbox"/> Tank Systems Removal? | <input type="checkbox"/> Spill Containment Installation? | <input type="checkbox"/> Change in Storage to a Non-Regulated Substance? |
| <input type="checkbox"/> Tank Systems Closed in Place? | <input type="checkbox"/> Dispenser Liners Installation? | <input type="checkbox"/> Release Prevention Barrier Installation? |
| <input type="checkbox"/> Piping Sump Installation? | <input type="checkbox"/> Secondary Containment Installation? | <input type="checkbox"/> Other? (please explain) |

4. Please Check Yes or No to the following:

| | | |
|---|---|--|
| a. Was there previously reported contamination discovered on site? If yes, was | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| 1. A Discharge Report Form submitted to the County? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. An investigation performed in accordance with Rule 62-761.820, F.A.C.? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Is the depth to groundwater less than 20 feet? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Are there monitoring wells on site? If yes, were they | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| 1. Groundwater monitoring wells? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. Vapor monitoring wells? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. Used for closure assessment sampling? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. Properly closed? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 5. Retained for site assessment purposes? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. If tanks were replaced, were contaminated soils returned to the tank excavation? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

Signature of owner or operator

Richard D. McCann
Signature of person performing
Limited Closure Assessment

Richard D. McCann
Name of person performing
Limited Closure Assessment

(date)

(date)

2/23/01

Affiliation Aerostar Environmental Services, Inc.

Printed on recycled paper.

APPENDIX B
STORAGE TANK FACILITY REGISTRATION FORM



Florida Department of Environmental Protection
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Storage Tank Facility Registration Form

| |
|--|
| DEP Form # 62-761.900(2) |
| Form Title <u>Storage Tank Registration Form</u> |
| Effective Date: <u>July 13, 1998</u> |
| DEP Application No. _____ (Filled in by DEP) |

Submit a completed form for the facility when registration of storage tanks or compression vessels is required by Chapter 376.303, Florida Statutes

Please review **Registration Instructions** before completing the form.

| | | | |
|-----------------------------|--|---|---|
| Please check all that apply | <input type="checkbox"/> New Registration | <input type="checkbox"/> New Owner | <input type="checkbox"/> New Tanks |
| | <input type="checkbox"/> Facility Info Update/Correction | <input type="checkbox"/> Owner Info Update/Correction | <input checked="" type="checkbox"/> Tank Info Update/Correction |

A. FACILITY INFORMATION

County: **DUVAL**

DEP Facility ID:

168626008

Facility Name: MAYPORT NAVAL STATION

Facility Address: _____ City: Jacksonville Zip: _____

Facility Contact: _____ Business Phone: (____) _____

Facility Type(s): _____ NAICS Code: _____ Financial Responsibility: _____

24 Hour Emergency Contact: _____ Emergency Phone: (____) _____

B. RESPONSIBLE PERSON INFORMATION - Identify Individual(s) or Business(es) responsible for storage tank management, fueling operations, and/or cleanup activities at the facility location named above. **Provide additional information in an attachment if necessary.**

| | | |
|--|---|----------------|
| Name: | Facility - Responsible Person Relation Type: | Effective Date |
| Mail address: | <input checked="" type="checkbox"/> Facility Account Owner (pays fees) | |
| City, ST, Zip: | Facility Account Owner information must be provided when the facility contains active (in-use) storage tanks on site. | |
| Contact: | | |
| Telephone: | STCM Account Number (if known) | |
| Identify other appropriate facility relationships for this party: <input type="checkbox"/> Facility Owner/Operator <input type="checkbox"/> Property Owner <input type="checkbox"/> Storage Tank Owner | | |

| | | |
|----------------|--|----------------|
| Name: | Other owner, relationship type(s) | Effective Date |
| Mail address: | <input type="checkbox"/> Facility Owner/Operator | |
| City, ST, Zip: | <input type="checkbox"/> Property Owner | |
| Contact: | <input type="checkbox"/> Storage Tank Owner | |
| Telephone: | <input type="checkbox"/> Other: | |

C. TANK/VESSEL INFORMATION - Complete one row for each storage tank or compression vessel system located at this facility.

| Tank ID | T/V | A/U | Capacity | Installed | Content | Status/Effective Date | Construction | Piping | Monitoring |
|---------|-----|-----|-----------|-----------|---------|-----------------------|--------------|--------|------------|
| 1 | T | A | 598000gal | 1960 | F | B 01/01 | C | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Certified Contractor (performing tank installation or removal): _____ DBPR License No.: _____

Registration Certification: To the best of my knowledge and belief, all information submitted on this form is true, accurate, and complete.

Printed Name & Title

Signature

Date

DEP 62-761.900(2)

Northwest District
160 Governmental Center Blvd.
Pensacola, FL 32501
850-595-8360

Northeast District
7825 Baymeadows Way,
Suite B200
Jacksonville, FL 32256
904-448-4300

Central District
3319 Maguire Blvd.,
Suite 232
Orlando, FL 32803
407-894-7555

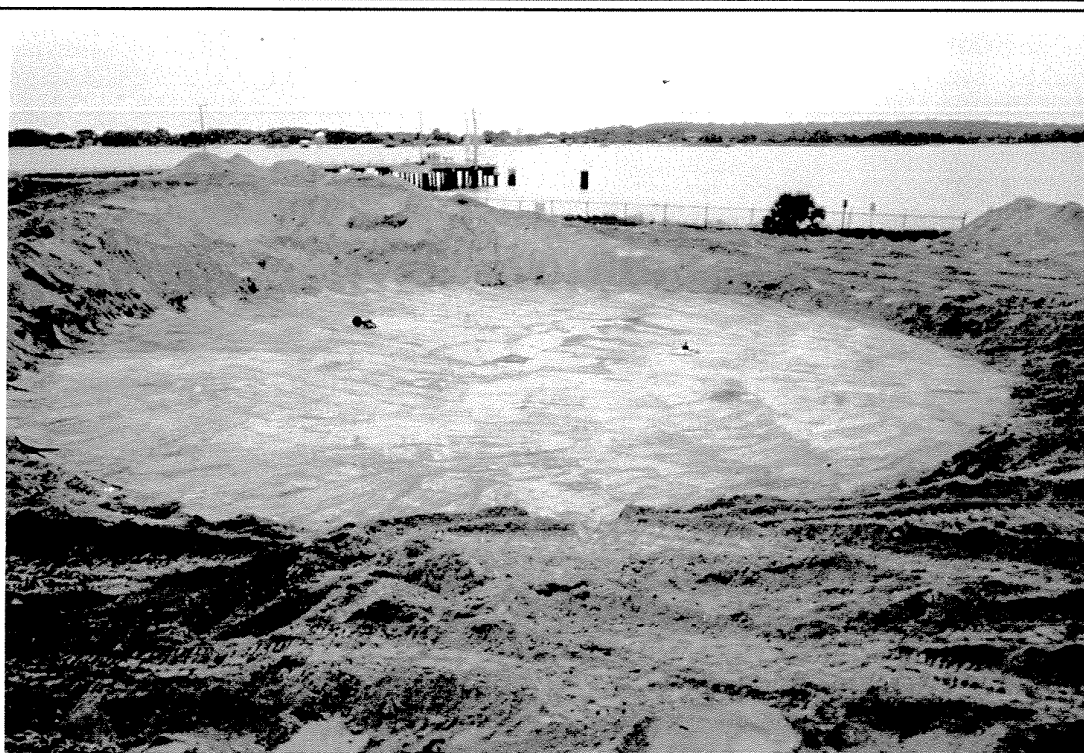
Southwest District
3804 Coconut Palm Drive
Tampa, FL 33619
813-744-6100

Southeast District
400 North Congress Ave.,
W Palm Beach, FL 33416
561-681-6600

South District
2295 Victoria Ave.,
Suite 364
Fort Myers, FL 33901
941-332-6975

Marathon Branch Office
2796 Overseas Hwy.,
Suite 221
Marathon, FL 33050
305-289-2310

APPENDIX C
PHOTOGRAPHIC DOCUMENTATION



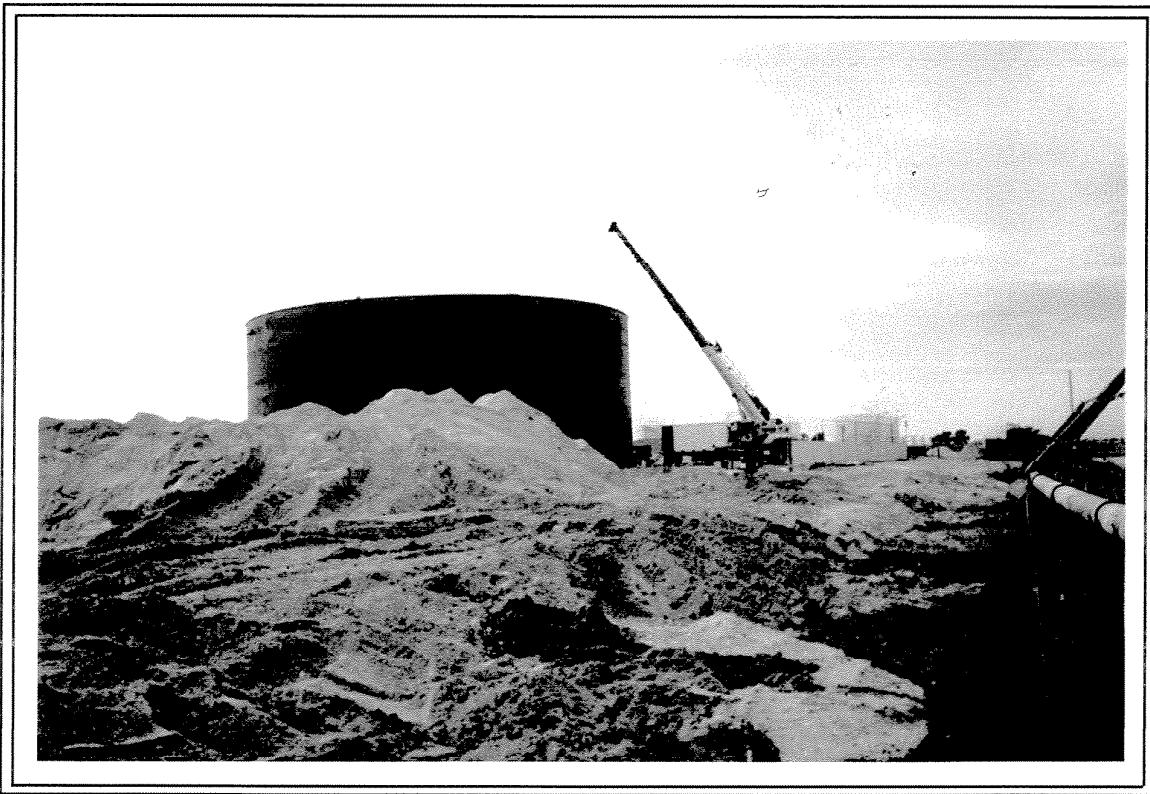
1) View facing north at Tank #202 bottom St. Johns River.



2) View facing south across newly constructed wall with base in background.



3) View facing east across newly constructed wall with St. Johns River in background.



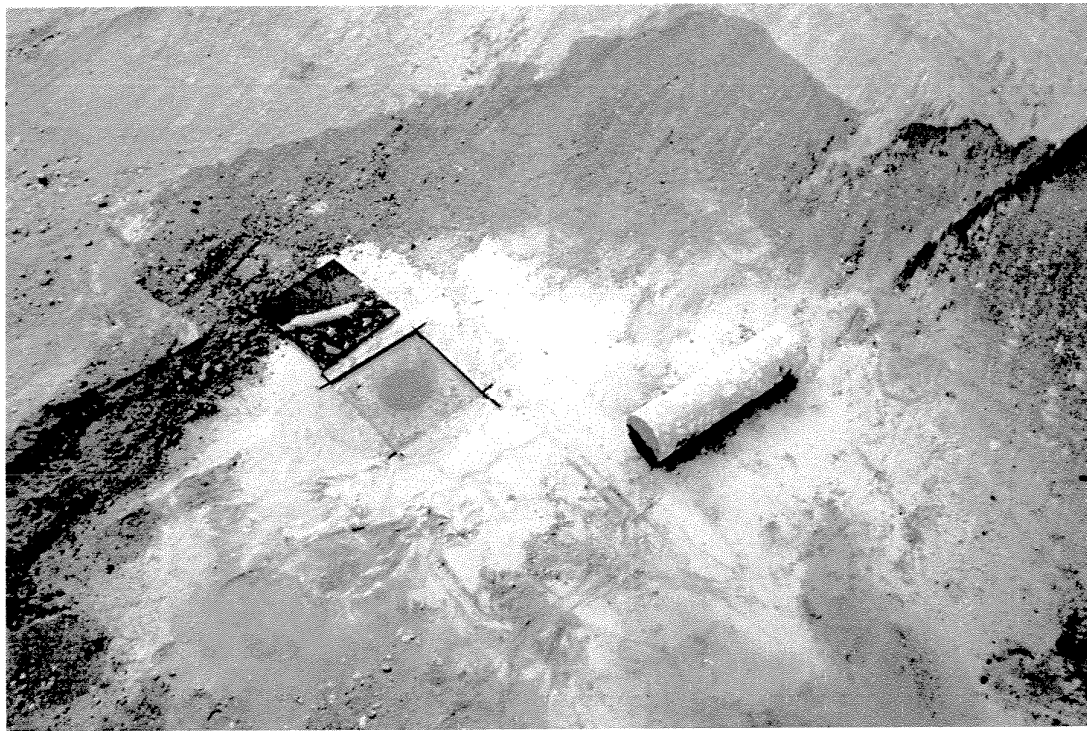
4) View facing west from Tank #202 site at newly constructed tank at location of former Tank #201.



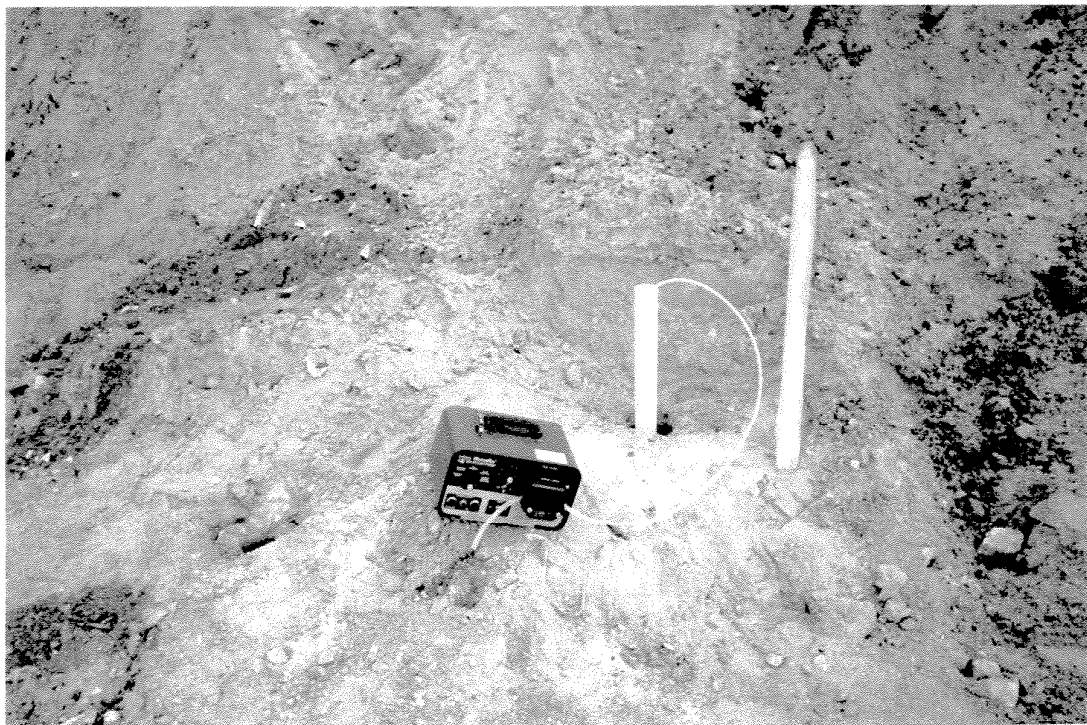
5) View facing north at soil/groundwater sampling locations in tank bottom and northern perimeter.



6) View facing southwest at soil/groundwater sampling locations.



7) View showing thickness of steel tank bottom and of concrete pad.



8) View of low-flow groundwater sampling activities at perimeter sampling location.

APPENDIX D
LABORATORY ANALYTICAL REPORTS

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX15379
DATE SUBMITTED: January 19, 2001
DATE REPORTED : January 31, 2001

PAGE 1 OF 24

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT : MAYPORT NAVAL ST.

Tank Closure

01/18/01

| | | | | | |
|-----|---|------|-----------|---|-------|
| #1 | - | PB-1 | (4'DEPTH) | @ | 10:25 |
| #2 | - | PB-2 | (5'DEPTH) | @ | 10:25 |
| #3 | - | PB-3 | (4'DEPTH) | @ | 10:25 |
| #4 | - | PB-4 | (5'DEPTH) | @ | 10:25 |
| #5 | - | PB-5 | (5'DEPTH) | @ | 10:25 |
| #6 | - | PB-6 | (5'DEPTH) | @ | 10:25 |
| #7 | - | PB-7 | (5'DEPTH) | @ | 15:10 |
| #8 | - | PB-8 | (4'DEPTH) | @ | 16:00 |
| #9 | - | TB-1 | (4'DEPTH) | @ | 08:30 |
| #10 | - | TB-2 | (2'DEPTH) | @ | 09:10 |
| #11 | - | TB-3 | (5'DEPTH) | @ | 10:15 |
| #12 | - | TB-4 | (3'DEPTH) | @ | 11:00 |
| #13 | - | TB-5 | (4'DEPTH) | @ | 11:35 |

PROJECT MANAGER

Scott D. Martin

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | <u>PB-1 (4' DEPTH)</u> | <u>PB-2 (5' DEPTH)</u> | <u>Units</u> |
|-------------------------|------------------------|------------------------|---------------|
| Methyl tert-butyl ether | 1100 U D1 | 630 U D2 | µg/Kg |
| Benzene | 1100 U D1 | 630 U D2 | µg/Kg |
| Toluene | 1100 U D1 | 630 U D2 | µg/Kg |
| Chlorobenzene | 1100 U D1 | 630 U D2 | µg/Kg |
| Ethylbenzene | 1100 U D1 | 630 U D2 | µg/Kg |
| m-Xylene & p-Xylene | 2200 U D1 | 1300 U D2 | µg/Kg |
| o-Xylene | 1100 U D1 | 630 U D2 | µg/Kg |
| 1,3-Dichlorobenzene | 1100 U D1 | 630 U D2 | µg/Kg |
| 1,4-Dichlorobenzene | 1100 U D1 | 630 U D2 | µg/Kg |
| 1,2-Dichlorobenzene | 1100 U D1 | 630 U D2 | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Dibromofluoromethane | 91 | 95 | 70-134 |
| D8-Toluene | 98 | 104 | 60-144 |
| Bromofluorobenzene | 105 | 116 | 71-127 |
| Date Analyzed | 01/25/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.

D1 = Analyte value determined from a 1:1000 dilution.

D2 = Analyte value determined from a 1:500 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

| | <u>PB-1 (4' DEPTH)</u> | | | <u>PB-2 (5' DEPTH)</u> | | | <u>Units</u> |
|------------------------|------------------------|---|----|------------------------|----|----|--------------|
| Naphthalene | 1800 | U | D3 | 16000 | D4 | | µg/Kg |
| Acenaphthylene | 3500 | U | D3 | 420 | U | D4 | µg/Kg |
| 1-Methylnaphthalene | 42000 | | D3 | 39000 | | D3 | µg/Kg |
| 2-Methylnaphthalene | 50000 | | D3 | 54000 | | D3 | µg/Kg |
| Acenaphthene | 1800 | U | D3 | 210 | U | D4 | µg/Kg |
| Fluorene | 360 | U | D3 | 42 | U | D4 | µg/Kg |
| Phenanthrene | 3500 | U | D3 | 420 | U | D4 | µg/Kg |
| Anthracene | 1800 | U | D3 | 210 | U | D4 | µg/Kg |
| Fluoranthene | 9400 | | D3 | 5100 | | D4 | µg/Kg |
| Pyrene | 7500 | | D3 | 4200 | | D4 | µg/Kg |
| Benzo(a)anthracene | 2800 | | D3 | 1100 | | D4 | µg/Kg |
| Chrysene | 2600 | | D3 | 980 | | D4 | µg/Kg |
| Benzo(b)fluoranthene | 1200 | | D3 | 450 | | D4 | µg/Kg |
| Benzo(k)fluoranthene | 810 | | D3 | 270 | | D4 | µg/Kg |
| Benzo(a)pyrene | 1400 | | D3 | 530 | | D4 | µg/Kg |
| Dibenzo(a,h)anthracene | 430 | | D3 | 120 | | D4 | µg/Kg |
| Benzo(g,h,i)perylene | 940 | | D3 | 230 | | D4 | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 950 | | D3 | 580 | | D4 | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | | <u>% RECOV</u> | | <u>LIMITS</u> |
|---------------|----------------|---|----------------|---|---------------|
| p-terphenyl | 0 | U | 0 | U | 39-141 |
| Date Prepared | 01/24/01 | | 01/24/01 | | |
| Date Analyzed | 01/26/01 | | 01/26/01 | | |

MISCELLANEOUS

| | <u>METHOD</u> | <u>PB-1 (4' DEPTH)</u> | | <u>PB-2 (5' DEPTH)</u> | | <u>Units</u> |
|----------------|---------------|------------------------|--|------------------------|--|--------------|
| Percent Solids | SM2540G | 93 | | 79 | | % |
| Date Analyzed | | 01/22/01 | | 01/22/01 | | |

U = Compound was analyzed for but not detected to the level shown.

D3 = Analyte value determined from a 1:100 dilution.

D4 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>PB-1 (4' DEPTH)</u> | <u>PB-2 (5' DEPTH)</u> | <u>Units</u> |
|-----------------------|------------------------|------------------------|---------------|
| Hydrocarbons (C8-C40) | 14000 D5 | 8300 D5 | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | * | * | 51-148 |
| Date Prepared | 01/23/01 | 01/23/01 | |
| Date Analyzed | 01/24/01 | 01/24/01 | |

* = Surrogate recovery unavailable due to sample dilution.
U = Compound was analyzed for but not detected to the level shown.
D5 = Analyte value determined from a 1:50 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | <u>PB-3 (4'DEPTH)</u> | <u>PB-4 (5'DEPTH)</u> | <u>Units</u> |
|-------------------------|-----------------------|-----------------------|---------------|
| Methyl tert-butyl ether | 1100 U D1 | 1000 U D1 | µg/Kg |
| Benzene | 1100 U D1 | 1000 U D1 | µg/Kg |
| Toluene | 1100 U D1 | 1000 U D1 | µg/Kg |
| Chlorobenzene | 1100 U D1 | 1000 U D1 | µg/Kg |
| Ethylbenzene | 1100 U D1 | 1000 U D1 | µg/Kg |
| m-Xylene & p-Xylene | 2200 U D1 | 2100 U D1 | µg/Kg |
| o-Xylene | 1100 U D1 | 1000 U D1 | µg/Kg |
| 1,3-Dichlorobenzene | 1100 U D1 | 1000 U D1 | µg/Kg |
| 1,4-Dichlorobenzene | 1100 U D1 | 1000 U D1 | µg/Kg |
| 1,2-Dichlorobenzene | 1100 U D1 | 1000 U D1 | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Dibromofluoromethane | 92 | 94 | 70-134 |
| D8-Toluene | 100 | 100 | 60-144 |
| Bromofluorobenzene | 107 | 108 | 71-127 |
| Date Analyzed | 01/25/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:1000 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>PB-3 (4'DEPTH)</u> | <u>PB-4 (5'DEPTH)</u> | <u>Units</u> |
|------------------------|-----------------------|-----------------------|--------------|
| Naphthalene | 1800 U D3 | 170 U D4 | µg/Kg |
| Acenaphthylene | 3500 U D3 | 350 U D4 | µg/Kg |
| 1-Methylnaphthalene | 72000 D3 | 41000 D3 | µg/Kg |
| 2-Methylnaphthalene | 90000 D3 | 37000 D3 | µg/Kg |
| Acenaphthene | 1800 U D3 | 170 U D4 | µg/Kg |
| Fluorene | 360 U D3 | 430 D4 | µg/Kg |
| Phenanthrene | 3500 U D3 | 350 U D4 | µg/Kg |
| Anthracene | 1800 U D3 | 170 U D4 | µg/Kg |
| Fluoranthene | 2600 D3 | 1100 D4 | µg/Kg |
| Pyrene | 2000 D3 | 1000 D4 | µg/Kg |
| Benzo(a)anthracene | 1800 U D3 | 170 U D4 | µg/Kg |
| Chrysene | 360 U D3 | 35 U D4 | µg/Kg |
| Benzo(b)fluoranthene | 360 U D3 | 35 U D4 | µg/Kg |
| Benzo(k)fluoranthene | 360 U D3 | 35 U D4 | µg/Kg |
| Benzo(a)pyrene | 360 U D3 | 35 U D4 | µg/Kg |
| Dibenzo(a,h)anthracene | 360 U D3 | 35 U D4 | µg/Kg |
| Benzo(g,h,i)perylene | 360 U D3 | 35 U D4 | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 360 U D3 | 35 U D4 | µg/Kg |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| p-terphenyl | 0 U | 136 | 39-141 |
| Date Prepared | 01/24/01 | 01/24/01 | |
| Date Analyzed | 01/26/01 | 01/26/01 | |

| <u>MISCELLANEOUS</u> | <u>METHOD</u> | <u>PB-3 (4'DEPTH)</u> | <u>PB-4 (5'DEPTH)</u> | <u>Units</u> |
|----------------------|---------------|-----------------------|-----------------------|--------------|
| Percent Solids | SM2540G | 93 | 95 | % |
| Date Analyzed | | 01/22/01 | 01/22/01 | |

U = Compound was analyzed for but not detected to the level shown.

D3 = Analyte value determined from a 1:100 dilution.

D4 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>PB-3 (4'DEPTH)</u> | | <u>PB-4 (5'DEPTH)</u> | | <u>Units</u> |
|-----------------------|-----------------------|----|-----------------------|----|---------------|
| Hydrocarbons (C8-C40) | 12000 | D5 | 11000 | D5 | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | | <u>% RECOV</u> | | <u>LIMITS</u> |
| o-Terphenyl | * | | * | | 51-148 |
| Date Prepared | 01/23/01 | | 01/23/01 | | |
| Date Analyzed | 01/24/01 | | 01/24/01 | | |

* = Surrogate recovery unavailable due to sample dilution.

U = Compound was analyzed for but not detected to the level shown.

D5 = Analyte value determined from a 1:50 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | <u>PB-5 (5'DEPTH)</u> | <u>PB-6 (5'DEPTH)</u> | <u>Units</u> |
|-------------------------|-----------------------|-----------------------|---------------|
| Methyl tert-butyl ether | 530 U D2 | 1.4 U D6 | µg/Kg |
| Benzene | 530 U D2 | 1.4 U D6 | µg/Kg |
| Toluene | 530 U D2 | 1.4 U D6 | µg/Kg |
| Chlorobenzene | 530 U D2 | 1.4 U D6 | µg/Kg |
| Ethylbenzene | 530 U D2 | 1.4 U D6 | µg/Kg |
| m-Xylene & p-Xylene | 1000 U D2 | 2.8 U D6 | µg/Kg |
| o-Xylene | 530 U D2 | 1.4 U D6 | µg/Kg |
| 1,3-Dichlorobenzene | 530 U D2 | 1.4 U D6 | µg/Kg |
| 1,4-Dichlorobenzene | 530 U D2 | 1.4 U D6 | µg/Kg |
| 1,2-Dichlorobenzene | 530 U D2 | 1.4 U D6 | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Dibromofluoromethane | 94 | 93 | 70-134 |
| D8-Toluene | 100 | 96 | 60-144 |
| Bromofluorobenzene | 99 | 94 | 71-127 |
| Date Analyzed | 01/25/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.

D2 = Analyte value determined from a 1:500 dilution.

D6 = Analyte value determined from a 1:1.35 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>PB-5 (5'DEPTH)</u> | <u>PB-6 (5'DEPTH)</u> | <u>Units</u> |
|------------------------|-----------------------|-----------------------|---------------|
| Naphthalene | 17 U | 17 U | µg/Kg |
| Acenaphthylene | 35 U | 34 U | µg/Kg |
| 1-Methylnaphthalene | 39 | 34 U | µg/Kg |
| 2-Methylnaphthalene | 53 | 34 U | µg/Kg |
| Acenaphthene | 17 U | 17 U | µg/Kg |
| Fluorene | 28 | 3.4 U | µg/Kg |
| Phenanthrene | 35 U | 34 U | µg/Kg |
| Anthracene | 17 U | 17 U | µg/Kg |
| Fluoranthene | 24 | 3.4 U | µg/Kg |
| Pyrene | 32 | 3.4 U | µg/Kg |
| Benzo(a)anthracene | 17 U | 17 U | µg/Kg |
| Chrysene | 3.5 U | 3.4 U | µg/Kg |
| Benzo(b)fluoranthene | 3.5 U | 3.4 U | µg/Kg |
| Benzo(k)fluoranthene | 3.5 U | 3.4 U | µg/Kg |
| Benzo(a)pyrene | 3.5 U | 3.4 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.5 U | 3.4 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.5 U | 3.4 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.5 U | 3.4 U | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-terphenyl | 100 | 93 | 39-141 |
| Date Prepared | 01/24/01 | 01/24/01 | |
| Date Analyzed | 01/27/01 | 01/26/01 | |

| <u>MISCELLANEOUS</u> | <u>METHOD</u> | <u>PB-5 (5'DEPTH)</u> | <u>PB-6 (5'DEPTH)</u> | <u>Units</u> |
|----------------------|---------------|-----------------------|-----------------------|--------------|
| Percent Solids | SM2540G | 95 | 96 | % |
| Date Analyzed | | 01/22/01 | 01/22/01 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>PB-5 (5'DEPTH)</u> | <u>PB-6 (5'DEPTH)</u> | <u>Units</u> |
|-----------------------|-----------------------|-----------------------|---------------|
| Hydrocarbons (C8-C40) | 210 | 6.9 U | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 98 | 82 | 51-148 |
| Date Prepared | 01/23/01 | 01/23/01 | |
| Date Analyzed | 01/24/01 | 01/24/01 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | <u>PB-7 (5'DEPTH)</u> | <u>PB-8 (4'DEPTH)</u> | <u>Units</u> |
|-------------------------|-----------------------|-----------------------|---------------|
| Methyl tert-butyl ether | 1000 U D1 | 680 U D2 | µg/Kg |
| Benzene | 1000 U D1 | 680 U D2 | µg/Kg |
| Toluene | 1000 U D1 | 680 U D2 | µg/Kg |
| Chlorobenzene | 1000 U D1 | 680 U D2 | µg/Kg |
| Ethylbenzene | 1000 U D1 | 680 U D2 | µg/Kg |
| m-Xylene & p-Xylene | 2100 U D1 | 1400 U D2 | µg/Kg |
| o-Xylene | 1000 U D1 | 680 U D2 | µg/Kg |
| 1,3-Dichlorobenzene | 1000 U D1 | 680 U D2 | µg/Kg |
| 1,4-Dichlorobenzene | 1000 U D1 | 680 U D2 | µg/Kg |
| 1,2-Dichlorobenzene | 1000 U D1 | 680 U D2 | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Dibromofluoromethane | 94 | 95 | 70-134 |
| D8-Toluene | 98 | 99 | 60-144 |
| Bromofluorobenzene | 106 | 101 | 71-127 |
| Date Analyzed | 01/25/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.

D1 = Analyte value determined from a 1:1000 dilution.

D2 = Analyte value determined from a 1:500 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>PB-7 (5'DEPTH)</u> | | <u>PB-8 (4'DEPTH)</u> | | <u>Units</u> |
|------------------------|-----------------------|----|-----------------------|----|--------------|
| Naphthalene | 20000 | D5 | 230 U | D4 | µg/Kg |
| Acenaphthylene | 1700 U | D5 | 450 U | D4 | µg/Kg |
| 1-Methylnaphthalene | 54000 | D5 | 450 U | D4 | µg/Kg |
| 2-Methylnaphthalene | 83000 | D5 | 450 U | D4 | µg/Kg |
| Acenaphthene | 870 U | D5 | 230 U | D4 | µg/Kg |
| Fluorene | 170 U | D5 | 45 U | D4 | µg/Kg |
| Phenanthrene | 1700 U | D5 | 450 U | D4 | µg/Kg |
| Anthracene | 870 U | D5 | 230 U | D4 | µg/Kg |
| Fluoranthene | 15000 | D5 | 150 | D4 | µg/Kg |
| Pyrene | 12000 | D5 | 160 | D4 | µg/Kg |
| Benzo(a)anthracene | 4600 | D5 | 230 U | D4 | µg/Kg |
| Chrysene | 4100 | D5 | 45 U | D4 | µg/Kg |
| Benzo(b)fluoranthene | 1600 | D5 | 45 U | D4 | µg/Kg |
| Benzo(k)fluoranthene | 1000 | D5 | 45 U | D4 | µg/Kg |
| Benzo(a)pyrene | 1900 | D5 | 45 U | D4 | µg/Kg |
| Dibenzo(a,h)anthracene | 530 | D5 | 45 U | D4 | µg/Kg |
| Benzo(g,h,i)perylene | 1000 | D5 | 45 U | D4 | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 1100 | D5 | 45 U | D4 | µg/Kg |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| p-terphenyl | 0 U | 85 | 39-141 |
| Date Prepared | 01/24/01 | 01/24/01 | |
| Date Analyzed | 01/26/01 | 01/26/01 | |

| <u>MISCELLANEOUS</u> | <u>METHOD</u> | <u>PB-7 (5'DEPTH)</u> | <u>PB-8 (4'DEPTH)</u> | <u>Units</u> |
|----------------------|---------------|-----------------------|-----------------------|--------------|
| Percent Solids | SM2540G | 95 | 73 | % |
| Date Analyzed | | 01/22/01 | 01/22/01 | |

U = Compound was analyzed for but not detected to the level shown.

D4 = Analyte value determined from a 1:10 dilution.

D5 = Analyte value determined from a 1:50 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>PB-7 (5'DEPTH)</u> | <u>PB-8 (4'DEPTH)</u> | <u>Units</u> |
|-----------------------|-----------------------|-----------------------|---------------|
| Hydrocarbons (C8-C40) | 13000 D3 | 1000 D7 | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o Terphenyl | * | * | 51-148 |
| Date Prepared | 01/23/01 | 01/23/01 | |
| Date Analyzed | 01/24/01 | 01/24/01 | |

* = Surrogate recovery unavailable due to sample dilution.

U = Compound was analyzed for but not detected to the level shown.

D3 = Analyte value determined from a 1:100 dilution.

D7 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | <u>TB-1 (4'DEPTH)</u> | <u>TB-2 (2'DEPTH)</u> | <u>Units</u> |
|-------------------------|-----------------------|-----------------------|---------------|
| Methyl tert-butyl ether | 560 U D2 | 1.3 U D8 | µg/Kg |
| Benzene | 560 U D2 | 1.3 U D8 | µg/Kg |
| Toluene | 560 U D2 | 1.3 U D8 | µg/Kg |
| Chlorobenzene | 560 U D2 | 1.3 U D8 | µg/Kg |
| Ethylbenzene | 560 U D2 | 1.3 U D8 | µg/Kg |
| m-Xylene & p-Xylene | 1100 U D2 | 2.7 U D8 | µg/Kg |
| o-Xylene | 560 U D2 | 1.3 U D8 | µg/Kg |
| 1,3-Dichlorobenzene | 560 U D2 | 1.3 U D8 | µg/Kg |
| 1,4-Dichlorobenzene | 560 U D2 | 1.3 U D8 | µg/Kg |
| 1,2-Dichlorobenzene | 560 U D2 | 1.3 U D8 | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Dibromofluoromethane | 95 | 67 | 70-134 |
| D8-Toluene | 98 | 97 | 60-144 |
| Bromofluorobenzene | 108 | 100 | 71-127 |
| Date Analyzed | 01/25/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.

D2 = Analyte value determined from a 1:500 dilution.

D8 = Analyte value determined from a 1:1.18 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>TB-1 (4'DEPTH)</u> | <u>TB-2 (2'DEPTH)</u> | <u>Units</u> |
|--------------------------|-----------------------|-----------------------|--------------|
| Naphthalene | 180 U D4 | 18 U | µg/Kg |
| Acenaphthylene | 370 U D4 | 37 U | µg/Kg |
| 1-Methylnaphthalene | 5600 D4 | 47 | µg/Kg |
| 2-Methylnaphthalene | 8600 D4 | 50 | µg/Kg |
| Acenaphthene | 180 U D4 | 18 U | µg/Kg |
| Fluorene | 37 U D4 | 3.7 U | µg/Kg |
| Phenanthrene | 370 U D4 | 37 U | µg/Kg |
| Anthracene | 180 U D4 | 18 U | µg/Kg |
| Fluoranthene | 37 U D4 | 14 | µg/Kg |
| Pyrene | 37 U D4 | 12 | µg/Kg |
| Benzo (a) anthracene | 180 U D4 | 18 U | µg/Kg |
| Chrysene | 37 U D4 | 3.7 U | µg/Kg |
| Benzo (b) fluoranthene | 37 U D4 | 3.7 U | µg/Kg |
| Benzo (k) fluoranthene | 37 U D4 | 3.7 U | µg/Kg |
| Benzo (a) pyrene | 37 U D4 | 3.7 U | µg/Kg |
| Dibenzo (a,h) anthracene | 37 U D4 | 3.7 U | µg/Kg |
| Benzo (g,h,i) perylene | 37 U D4 | 3.7 U | µg/Kg |
| Indeno (1,2,3-cd) pyrene | 37 U D4 | 3.7 U | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| p-terphenyl | 80 | 85 | 39-141 |
| Date Prepared | 01/24/01 | 01/24/01 | |
| Date Analyzed | 01/26/01 | 01/27/01 | |

MISCELLANEOUS

| | <u>METHOD</u> | <u>TB-1 (4'DEPTH)</u> | <u>TB-2 (2'DEPTH)</u> | <u>Units</u> |
|----------------|---------------|-----------------------|-----------------------|--------------|
| Percent Solids | SM2540G | 90 | 89 | % |
| Date Analyzed | | 01/22/01 | 01/22/01 | |

U = Compound was analyzed for but not detected to the level shown.
D4 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES

REPORT # : JAX15379
 DATE REPORTED: January 31, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>TB-1 (4'DEPTH)</u> | <u>TB-2 (2'DEPTH)</u> | <u>Units</u> |
|-----------------------|-----------------------|-----------------------|---------------|
| Hydrocarbons (C8-C40) | 1400 D7 | 12 | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | * | 98 | 51-148 |
| Date Prepared | 01/25/01 | 01/25/01 | |
| Date Analyzed | 01/29/01 | 01/29/01 | |

* = Surrogate recovery unavailable due to sample dilution.
 U = Compound was analyzed for but not detected to the level shown.
 D7 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | <u>TB-3 (5'DEPTH)</u> | <u>TB-4 (3'DEPTH)</u> | <u>Units</u> |
|-------------------------|-----------------------|-----------------------|---------------|
| Methyl tert-butyl ether | 5700 U D9 | 1.3 U D8 | µg/Kg |
| Benzene | 5700 U D9 | 1.3 U D8 | µg/Kg |
| Toluene | 5700 U D9 | 1.3 U D8 | µg/Kg |
| Chlorobenzene | 5700 U D9 | 1.3 U D8 | µg/Kg |
| Ethylbenzene | 5700 U D9 | 1.3 U D8 | µg/Kg |
| m-Xylene & p-Xylene | 11000 U D9 | 2.6 U D8 | µg/Kg |
| o-Xylene | 5700 U D9 | 1.3 U D8 | µg/Kg |
| 1,3-Dichlorobenzene | 5700 U D9 | 1.3 U D8 | µg/Kg |
| 1,4-Dichlorobenzene | 5700 U D9 | 1.3 U D8 | µg/Kg |
| 1,2-Dichlorobenzene | 5700 U D9 | 1.3 U D8 | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Dibromofluoromethane | 84 | 82 | 70-134 |
| D8-Toluene | 94 | 97 | 60-144 |
| Bromofluorobenzene | 106 | 99 | 71-127 |
| Date Analyzed | 01/25/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.

D8 = Analyte value determined from a 1:1.18 dilution.

D9 = Analyte value determined from a 1:5000 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>TB-3 (5'DEPTH)</u> | <u>TB-4 (3'DEPTH)</u> | <u>Units</u> |
|------------------------|-----------------------|-----------------------|---------------|
| Naphthalene | 1900 U D3 | 18 U | µg/Kg |
| Acenaphthylene | 3800 U D3 | 35 U | µg/Kg |
| 1-Methylnaphthalene | 88000 D3 | 45 | µg/Kg |
| 2-Methylnaphthalene | 130000 D3 | 49 | µg/Kg |
| Acenaphthene | 1900 U D3 | 18 U | µg/Kg |
| Fluorene | 380 U D3 | 10 | µg/Kg |
| Phenanthrene | 3800 U D3 | 98 | µg/Kg |
| Anthracene | 1900 U D3 | 18 U | µg/Kg |
| Fluoranthene | 5500 D3 | 71 | µg/Kg |
| Pyrene | 1400 D3 | 70 | µg/Kg |
| Benzo(a)anthracene | 1900 U D3 | 21 | µg/Kg |
| Chrysene | 380 U D3 | 17 | µg/Kg |
| Benzo(b)fluoranthene | 380 U D3 | 8.0 | µg/Kg |
| Benzo(k)fluoranthene | 380 U D3 | 3.5 U | µg/Kg |
| Benzo(a)pyrene | 380 U D3 | 3.5 U | µg/Kg |
| Dibenzo(a,h)anthracene | 380 U D3 | 3.5 U | µg/Kg |
| Benzo(g,h,i)perylene | 380 U D3 | 3.5 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 380 U D3 | 3.5 U | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-terphenyl | 0 U | 95 | 39-141 |
| Date Prepared | 01/24/01 | 01/24/01 | |
| Date Analyzed | 01/26/01 | 01/27/01 | |

MISCELLANEOUSMETHODTB-3 (5'DEPTH)TB-4 (3'DEPTH)Units

Percent Solids SM2540G
Date Analyzed

88
01/22/01

94
01/22/01

%

U = Compound was analyzed for but not detected to the level shown.
D3 = Analyte value determined from a 1:100 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

Hydrocarbons (C8-C40)

TB-3 (5'DEPTH)

22000 D5

TB-4 (3'DEPTH)

8.3

Units

mg/Kg

Surrogate:

o Terphenyl

Date Prepared

Date Analyzed

% RECOV

*

01/25/01

01/29/01

% RECOV

128

01/25/01

01/29/01

LIMITS

51-148

* = Surrogate recovery unavailable due to sample dilution.

U = Compound was analyzed for but not detected to the level shown.

D5 = Analyte value determined from a 1:50 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | <u>TB-5 (4'DEPTH)</u> | <u>LAB BLANK</u> | <u>Units</u> |
|-------------------------|-----------------------|------------------|---------------|
| Methyl tert-butyl ether | 520 U D2 | 100 U D3 | µg/Kg |
| Benzene | 520 U D2 | 100 U D3 | µg/Kg |
| Toluene | 520 U D2 | 100 U D3 | µg/Kg |
| Chlorobenzene | 520 U D2 | 100 U D3 | µg/Kg |
| Ethylbenzene | 520 U D2 | 100 U D3 | µg/Kg |
| m-Xylene & p-Xylene | 1000 U D2 | 200 U D3 | µg/Kg |
| o-Xylene | 520 U D2 | 100 U D3 | µg/Kg |
| 1,3-Dichlorobenzene | 520 U D2 | 100 U D3 | µg/Kg |
| 1,4-Dichlorobenzene | 520 U D2 | 100 U D3 | µg/Kg |
| 1,2-Dichlorobenzene | 520 U D2 | 100 U D3 | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Dibromofluoromethane | 92 | 95 | 70-134 |
| D8-Toluene | 96 | 98 | 60-144 |
| Bromofluorobenzene | 110 | 99 | 71-127 |
| Date Analyzed | 01/25/01 | 01/24/01 | |

U = Compound was analyzed for but not detected to the level shown.

D2 = Analyte value determined from a 1:500 dilution.

D3 = Analyte value determined from a 1:100 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>TB-5 (4'DEPTH)</u> | <u>LAB BLANK</u> | <u>Units</u> |
|------------------------|-----------------------|------------------|--------------|
| Naphthalene | 170 U D4 | 16 U | µg/Kg |
| Acenaphthylene | 340 U D4 | 33 U | µg/Kg |
| 1-Methylnaphthalene | 19000 D4 | 33 U | µg/Kg |
| 2-Methylnaphthalene | 28000 D3 | 33 U | µg/Kg |
| Acenaphthene | 170 U D4 | 16 U | µg/Kg |
| Fluorene | 34 U D4 | 3.3 U | µg/Kg |
| Phenanthrene | 340 U D4 | 33 U | µg/Kg |
| Anthracene | 170 U D4 | 16 U | µg/Kg |
| Fluoranthene | 210 D4 | 3.3 U | µg/Kg |
| Pyrene | 380 D4 | 3.3 U | µg/Kg |
| Benzo(a)anthracene | 170 U D4 | 16 U | µg/Kg |
| Chrysene | 34 U D4 | 3.3 U | µg/Kg |
| Benzo(b)fluoranthene | 34 U D4 | 3.3 U | µg/Kg |
| Benzo(k)fluoranthene | 34 U D4 | 3.3 U | µg/Kg |
| Benzo(a)pyrene | 34 U D4 | 3.3 U | µg/Kg |
| Dibenzo(a,h)anthracene | 34 U D4 | 3.3 U | µg/Kg |
| Benzo(g,h,i)perylene | 34 U D4 | 3.3 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 34 U D4 | 3.3 U | µg/Kg |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| p-terphenyl | 116 | 93 | 39-141 |
| Date Prepared | 01/24/01 | 01/24/01 | |
| Date Analyzed | 01/26/01 | 01/25/01 | |

| <u>MISCELLANEOUS</u> | <u>METHOD</u> | <u>TB-5 (4'DEPTH)</u> | <u>LAB BLANK</u> | <u>Units</u> |
|----------------------|---------------|-----------------------|------------------|--------------|
| Percent Solids | SM2540G | 97 | NA | % |
| Date Analyzed | | 01/22/01 | | |

U = Compound was analyzed for but not detected to the level shown.

D3 = Analyte value determined from a 1:100 dilution.

D4 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES

REPORT # : JAX15379
 DATE REPORTED: January 31, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TB-5 (4'DEPTH)</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---|-----------------------|------------------|---------------|
| Hydrocarbons (C8-C40) | 4400 D5 | 6.6 U | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | * | 94 | 51-148 |
| Date Prepared | 01/25/01 | 01/23/01 | |
| Date Analyzed | 01/29/01 | 01/23/01 | |

* = Surrogate recovery unavailable due to sample dilution.

U = Compound was analyzed for but not detected to the level shown.

D5 = Analyte value determined from a 1:50 dilution.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

**EPA METHOD 8260 -
VOLATILE ORGANICS**

LAB BLANK

Units

Methyl tert-butyl ether
Benzene
Toluene
Chlorobenzene
Ethylbenzene
m-Xylene & p-Xylene
o-Xylene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene

1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
2.0 U
1.0 U
1.0 U
1.0 U
1.0 U

µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg

Surrogate:

% RECOV

LIMITS

Dibromofluoromethane
D8-Toluene
Bromofluorobenzene
Date Analyzed

97
97
100
01/25/01

70-134
60-144
71-127

**EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.**

LAB BLANK

Units

Hydrocarbons (C8-C40)

6.6 U

mg/Kg

Surrogate:

% RECOV

LIMITS

o-Terphenyl
Nonatriacontane
Date Prepared
Date Analyzed

82
84
01/25/01
01/29/01

51-148
36-152

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX15379

DATE REPORTED: January 31, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY MS/MSD/LCS</u> | <u>ACCEPT LIMITS</u> | <u>% RPD MS/MSD</u> | <u>ACCEPT LIMITS</u> |
|------------------------------|----------------------------------|--------------------------|-------------------------|--------------------------|
| <u>EPA Method 8260</u> | | | | |
| 1,1-Dichloroethene | 89/ 92/ 92 | 44-169 | 3 | 19 |
| Benzene | 105/102/104 | 50-140 | 3 | 23 |
| Trichloroethene | 102/103/101 | 75-125 | <1 | 17 |
| Toluene | 98/ 99/100 | 56-139 | 1 | 22 |
| Chlorobenzene | 100/ 99/100 | 73-123 | 1 | 24 |
| <u>EPA Method 8260</u> | | | | |
| 1,1-Dichloroethene | 88/ 88/ 91 | 44-169 | <1 | 19 |
| Benzene | 106/106/109 | 50-140 | <1 | 23 |
| Trichloroethene | 96/ 97/101 | 75-125 | 1 | 17 |
| Toluene | 97/101/103 | 56-139 | 4 | 22 |
| Chlorobenzene | 98/103/102 | 73-123 | 5 | 24 |
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 78/ 73/ 75 | 48-130 | 7 | 20 |
| Acenaphthene | 70/ 67/ 83 | 36-127 | 4 | 17 |
| Benzo(a)pyrene | 67/ 67/ 68 | 64-141 | <1 | 22 |
| Benzo(g,h,i)perylene | 94/ 97/ 98 | 58-168 | 3 | 21 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 73/ 86/ 80 | 62-204 | 16 | 25 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 86/ 81/ 75 | 62-204 | 6 | 25 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX15380
DATE SUBMITTED: January 19, 2001
DATE REPORTED : January 31, 2001

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ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: ~~2624~~ 2828

MAYPORT AST CLOSURE

| | | | | | |
|-----|---|------|---|-------|------------|
| #1 | - | PB-1 | @ | 09:30 | (01/18/01) |
| #2 | - | PB-2 | @ | 10:15 | (01/18/01) |
| #3 | - | PB-3 | @ | 11:15 | (01/18/01) |
| #4 | - | PB-4 | @ | 12:00 | (01/18/01) |
| #5 | - | PB-5 | @ | 13:12 | (01/18/01) |
| #6 | - | PB-6 | @ | 14:00 | (01/18/01) |
| #7 | - | PB-7 | @ | 15:20 | (01/18/01) |
| #8 | - | PB-8 | @ | 16:10 | (01/18/01) |
| #9 | - | PB-9 | @ | 17:00 | (01/18/01) |
| #10 | - | TB-1 | @ | 08:20 | (01/19/01) |
| #11 | - | TB-2 | @ | 08:50 | (01/19/01) |
| #12 | - | TB-3 | @ | 09:15 | (01/19/01) |
| #13 | - | TB-4 | @ | 09:50 | (01/19/01) |
| #14 | - | TB-5 | @ | 10:15 | (01/19/01) |

PROJECT MANAGER

Scott D. Martin

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

| | <u>PB-1</u> | | <u>PB-2</u> | | <u>Units</u> |
|---------------------------|----------------|------|----------------|---|---------------|
| Dichlorodifluoromethane | 5.0 | U D1 | 1.0 | U | µg/L |
| Chloromethane | 5.0 | U D1 | 1.0 | U | µg/L |
| Vinyl Chloride | 5.0 | U D1 | 1.0 | U | µg/L |
| Bromomethane | 5.0 | U D1 | 1.0 | U | µg/L |
| Chloroethane | 5.0 | U D1 | 1.0 | U | µg/L |
| Trichlorofluoromethane | 10 | U D1 | 2.0 | U | µg/L |
| 1,1-Dichloroethene | 5.0 | U D1 | 1.0 | U | µg/L |
| Methylene Chloride | 25 | U D1 | 5.0 | U | µg/L |
| t-1,2-Dichloroethene | 5.0 | U D1 | 1.0 | U | µg/L |
| 1,1-Dichloroethane | 5.0 | U D1 | 1.0 | U | µg/L |
| c-1,2-Dichloroethene | 5.0 | U D1 | 1.0 | U | µg/L |
| Chloroform | 5.0 | U D1 | 1.0 | U | µg/L |
| 1,1,1-Trichloroethane | 5.0 | U D1 | 1.0 | U | µg/L |
| Carbon Tetrachloride | 5.0 | U D1 | 1.0 | U | µg/L |
| 1,2-Dichloroethane | 5.0 | U D1 | 1.0 | U | µg/L |
| Trichloroethene | 5.0 | U D1 | 1.0 | U | µg/L |
| 1,2-Dichloropropene | 5.0 | U D1 | 1.0 | U | µg/L |
| Bromodichloromethane | 5.0 | U D1 | 1.0 | U | µg/L |
| c-1,3-Dichloropropene | 5.0 | U D1 | 1.0 | U | µg/L |
| t-1,3-Dichloropropene | 5.0 | U D1 | 1.0 | U | µg/L |
| 1,1,2-Trichloroethane | 5.0 | U D1 | 1.0 | U | µg/L |
| Tetrachloroethene | 5.0 | U D1 | 1.0 | U | µg/L |
| Dibromochloromethane | 5.0 | U D1 | 1.0 | U | µg/L |
| Chlorobenzene | 5.0 | U D1 | 1.0 | U | µg/L |
| Bromoform | 5.0 | U D1 | 1.0 | U | µg/L |
| 1,1,2,2-Tetrachloroethane | 5.0 | U D1 | 1.0 | U | µg/L |
| 1,3-Dichlorobenzene | 5.0 | U D1 | 1.0 | U | µg/L |
| 1,4-Dichlorobenzene | 5.0 | U D1 | 1.0 | U | µg/L |
| 1,2-Dichlorobenzene | 5.0 | U D1 | 1.0 | U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | | <u>% RECOV</u> | | <u>LIMITS</u> |
| Bromofluorobenzene | 95 | | 109 | | 37-161 |
| Date Analyzed | 01/30/01 | | 01/27/01 | | |

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>PB-1</u> | <u>PB-2</u> | <u>Units</u> |
|-------------------------|----------------|----------------|---------------|
| Methyl tert-butyl ether | 10 U D1 | 2.0 U | µg/L |
| Benzene | 5.0 U D1 | 1.0 U | µg/L |
| Toluene | 5.0 U D1 | 1.0 U | µg/L |
| Chlorobenzene | 5.0 U D1 | 1.0 U | µg/L |
| Ethylbenzene | 5.0 U D1 | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 5.0 U D1 | 1.0 U | µg/L |
| o-Xylene | 5.0 U D1 | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 5.0 U D1 | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 5.0 U D1 | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 5.0 U D1 | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 109 | 110 | 52-147 |
| Date Analyzed | 01/30/01 | 01/27/01 | |

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>PB-1</u> | <u>PB-2</u> | <u>Units</u> |
|------------------------|-------------|-------------|--------------|
| Naphthalene | 0.50 U | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 76 D2 | 51 | µg/L |
| 2-Methylnaphthalene | 31 | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | 0.50 U | µg/L |
| Fluorene | 0.10 U | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 1.8 | 2.8 | µg/L |
| Pyrene | 1.5 | 2.4 | µg/L |
| Benzo(a)anthracene | 0.30 | 0.40 | µg/L |
| Chrysene | 0.42 | 0.49 | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| p-terphenyl | 83 | 101 | 43-148 |
| Date Prepared | 01/22/01 | 01/22/01 | |
| Date Analyzed | 01/23/01 | 01/24/01 | |

EPA METHOD 504 -
ETHYLENE DIBROMIDE

| | <u>PB-1</u> | <u>PB-2</u> | <u>Units</u> |
|--------------------|-------------|-------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 01/23/01 | 01/23/01 | |
| Date Analyzed | 01/23/01 | 01/23/01 | |

U = Compound was analyzed for but not detected to the level shown.
D2 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB-1</u> | <u>PB-2</u> | <u>Units</u> |
|---------------------|---------------|-------------|-------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 01/23/01 | 01/23/01 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>PB-1</u> | <u>PB-2</u> | <u>Units</u> |
|---|-------------|-------------|--------------|
| Hydrocarbons (C8-C40) | 4.2 | 4.7 | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| o-Terphenyl | 104 | 118 | 38-133 |
| Date Prepared | 01/23/01 | 01/23/01 | |
| Date Analyzed | 01/25/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX15380

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

| | <u>PB-3</u> | | | <u>PB-4</u> | | | <u>Units</u> |
|---------------------------|----------------|---|----|----------------|---|----|---------------|
| Dichlorodifluoromethane | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Chloromethane | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Vinyl Chloride | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Bromomethane | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Chloroethane | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Trichlorofluoromethane | 2000 | U | D3 | 1000 | U | D4 | µg/L |
| 1,1-Dichloroethene | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Methylene Chloride | 5000 | U | D3 | 2500 | U | D4 | µg/L |
| t-1,2-Dichloroethene | 1000 | U | D3 | 500 | U | D4 | µg/L |
| 1,1-Dichloroethane | 1000 | U | D3 | 500 | U | D4 | µg/L |
| c-1,2-Dichloroethene | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Chloroform | 1000 | U | D3 | 500 | U | D4 | µg/L |
| 1,1,1-Trichloroethane | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Carbon Tetrachloride | 1000 | U | D3 | 500 | U | D4 | µg/L |
| 1,2-Dichloroethane | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Trichloroethene | 1000 | U | D3 | 500 | U | D4 | µg/L |
| 1,2-Dichloropropane | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Bromodichloromethane | 1000 | U | D3 | 500 | U | D4 | µg/L |
| c-1,3-Dichloropropene | 1000 | U | D3 | 500 | U | D4 | µg/L |
| t-1,3-Dichloropropene | 1000 | U | D3 | 500 | U | D4 | µg/L |
| 1,1,2-Trichloroethane | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Tetrachloroethene | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Dibromochloromethane | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Chlorobenzene | 1000 | U | D3 | 500 | U | D4 | µg/L |
| Bromoform | 1000 | U | D3 | 500 | U | D4 | µg/L |
| 1,1,2,2-Tetrachloroethane | 1000 | U | D3 | 500 | U | D4 | µg/L |
| 1,3-Dichlorobenzene | 1000 | U | D3 | 500 | U | D4 | µg/L |
| 1,4-Dichlorobenzene | 1000 | U | D3 | 500 | U | D4 | µg/L |
| 1,2-Dichlorobenzene | 1000 | U | D3 | 500 | U | D4 | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | | | <u>% RECOV</u> | | | <u>LIMITS</u> |
| Bromofluorobenzene | 105 | | | 98 | | | 37-161 |
| Date Analyzed | 01/24/01 | | | 01/24/01 | | | |

U = Compound was analyzed for but not detected to the level shown.

D3 = Analyte value determined from a 1:1000 dilution.

D4 = Analyte value determined from a 1:500 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>PB-3</u> | <u>PB-4</u> | <u>Units</u> |
|-------------------------|----------------|----------------|---------------|
| Methyl tert-butyl ether | 2000 U D3 | 1000 U D4 | µg/L |
| Benzene | 1000 U D3 | 500 U D4 | µg/L |
| Toluene | 1000 U D3 | 500 U D4 | µg/L |
| Chlorobenzene | 1000 U D3 | 500 U D4 | µg/L |
| Ethylbenzene | 1000 U D3 | 500 U D4 | µg/L |
| m-Xylene & p-Xylene | 1000 U D3 | 500 U D4 | µg/L |
| o-Xylene | 1000 U D3 | 500 U D4 | µg/L |
| 1,3-Dichlorobenzene | 1000 U D3 | 500 U D4 | µg/L |
| 1,4-Dichlorobenzene | 1000 U D3 | 500 U D4 | µg/L |
| 1,2-Dichlorobenzene | 1000 U D3 | 500 U D4 | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 110 | 106 | 52-147 |
| Date Analyzed | 01/24/01 | 01/24/01 | |

U = Compound was analyzed for but not detected to the level shown.

D3 = Analyte value determined from a 1:1000 dilution.

D4 = Analyte value determined from a 1:500 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

| | <u>PB-3</u> | | <u>PB-4</u> | | <u>Units</u> |
|------------------------|-------------|----|-------------|----|--------------|
| Naphthalene | 1.1 | | 220 | D5 | µg/L |
| Acenaphthylene | 1.0 U | | 1.0 U | | µg/L |
| 1-Methylnaphthalene | 740 | D5 | 580 | D5 | µg/L |
| 2-Methylnaphthalene | 870 | D5 | 640 | D5 | µg/L |
| Acenaphthene | 0.50 U | | 0.50 U | | µg/L |
| Fluorene | 0.10 U | | 0.10 U | | µg/L |
| Phenanthrene | 1.0 U | | 1.0 U | | µg/L |
| Anthracene | 0.20 U | | 0.20 U | | µg/L |
| Fluoranthene | 17 | | 2.4 | | µg/L |
| Pyrene | 16 | | 8.3 | | µg/L |
| Benzo(a)anthracene | 3.4 | | 0.10 U | | µg/L |
| Chrysene | 2.5 | | 0.10 U | | µg/L |
| Benzo(b)fluoranthene | 0.98 | | 0.10 U | | µg/L |
| Benzo(k)fluoranthene | 0.67 | | 0.10 U | | µg/L |
| Benzo(a)pyrene | 0.10 U | | 0.10 U | | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | | 0.10 U | | µg/L |
| Benzo(g,h,i)perylene | 0.47 | | 0.10 U | | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | | 0.10 U | | µg/L |

Surrogate:

| | <u>% RECOV</u> | | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|--|----------------|---------------|
| p-terphenyl | 135 | | 106 | 43-148 |
| Date Prepared | 01/22/01 | | 01/22/01 | |
| Date Analyzed | 01/24/01 | | 01/24/01 | |

EPA METHOD 504 -

ETHYLENE DIBROMIDE

| | <u>PB-3</u> | | <u>PB-4</u> | <u>Units</u> |
|--------------------|-------------|--|-------------|--------------|
| Ethylene Dibromide | 0.020 U | | 0.020 U | µg/L |
| Date Prepared | 01/23/01 | | 01/23/01 | |
| Date Analyzed | 01/23/01 | | 01/23/01 | |

U = Compound was analyzed for but not detected to the level shown.
D5 = Analyte value determined from a 1:50 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB-3</u> | <u>PB-4</u> | <u>Units</u> |
|---------------------|---------------|-------------|-------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 01/23/01 | 01/23/01 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>PB-3</u> | <u>PB-4</u> | <u>Units</u> |
|-----------------------|-------------|-------------|--------------|
| Hydrocarbons (C8-C40) | 94 D2 | 66 D2 | mg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| o-Terphenyl | * | * | 38-133 |
| Date Prepared | 01/23/01 | 01/23/01 | |
| Date Analyzed | 01/25/01 | 01/26/01 | |

* = Surrogate recovery unavailable due to sample dilution.

U = Compound was analyzed for but not detected to the level shown.

D2 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

| | <u>PB-5</u> | | | <u>PB-6</u> | | | <u>Units</u> |
|---------------------------|----------------|---|----|----------------|---|----|---------------|
| Dichlorodifluoromethane | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Chloromethane | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Vinyl Chloride | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Bromomethane | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Chloroethane | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Trichlorofluoromethane | 20 | U | D2 | 10 | U | D1 | µg/L |
| 1,1-Dichloroethene | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Methylene Chloride | 50 | U | D2 | 25 | U | D1 | µg/L |
| t-1,2-Dichloroethene | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| 1,1-Dichloroethane | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| c-1,2-Dichloroethene | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Chloroform | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| 1,1,1-Trichloroethane | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Carbon Tetrachloride | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| 1,2-Dichloroethane | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Trichloroethene | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| 1,2-Dichloropropane | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Bromodichloromethane | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| c-1,3-Dichloropropene | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| t-1,3-Dichloropropene | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| 1,1,2-Trichloroethane | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Tetrachloroethene | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Dibromochloromethane | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Chlorobenzene | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| Bromoform | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| 1,1,2,2-Tetrachloroethane | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| 1,3-Dichlorobenzene | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| 1,4-Dichlorobenzene | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| 1,2-Dichlorobenzene | 10 | U | D2 | 5.0 | U | D1 | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | | | <u>% RECOV</u> | | | <u>LIMITS</u> |
| Bromofluorobenzene | 79 | | | 80 | | | 37-161 |
| Date Analyzed | 01/27/01 | | | 01/27/01 | | | |

U = Compound was analyzed for but not detected to the level shown.

D1 = Analyte value determined from a 1:5 dilution.

D2 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>PB-5</u> | <u>PB-6</u> | <u>Units</u> |
|-------------------------|----------------|----------------|---------------|
| Methyl tert-butyl ether | 20 U D2 | 10 U D1 | µg/L |
| Benzene | 10 U D2 | 5.0 U D1 | µg/L |
| Toluene | 10 U D2 | 5.0 U D1 | µg/L |
| Chlorobenzene | 10 U D2 | 5.0 U D1 | µg/L |
| Ethylbenzene | 10 U D2 | 5.0 U D1 | µg/L |
| m-Xylene & p-Xylene | 10 U D2 | 5.0 U D1 | µg/L |
| o-Xylene | 10 U D2 | 5.0 U D1 | µg/L |
| 1,3-Dichlorobenzene | 10 U D2 | 5.0 U D1 | µg/L |
| 1,4-Dichlorobenzene | 10 U D2 | 5.0 U D1 | µg/L |
| 1,2-Dichlorobenzene | 10 U D2 | 5.0 U D1 | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 116 | 115 | 52-147 |
| Date Analyzed | 01/27/01 | 01/27/01 | |

U = Compound was analyzed for but not detected to the level shown.

D1 = Analyte value determined from a 1:5 dilution.

D2 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

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RESULTS OF ANALYSIS

**EPA METHOD 8310 -
PAH BY HPLC**

| | <u>PB-5</u> | <u>PB-6</u> | <u>Units</u> |
|--------------------------|-----------------------|-----------------------|----------------------|
| Naphthalene | 4.0 | 5.8 | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 130 D2 | 45 | µg/L |
| 2-Methylnaphthalene | 17 | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | 0.50 U | µg/L |
| Fluorene | 0.10 U | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 0.29 | 0.10 U | µg/L |
| Pyrene | 0.58 | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | 0.10 U | µg/L |
| Chrysene | 0.10 U | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-terphenyl | 99 | 91 | 43-148 |
| Date Prepared | 01/22/01 | 01/22/01 | |
| Date Analyzed | 01/24/01 | 01/24/01 | |

**EPA METHOD 504 -
ETHYLENE DIBROMIDE**

| | <u>PB-5</u> | <u>PB-6</u> | <u>Units</u> |
|--------------------|-------------|-------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 01/23/01 | 01/23/01 | |
| Date Analyzed | 01/23/01 | 01/23/01 | |

U = Compound was analyzed for but not detected to the level shown.
D2 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB-5</u> | <u>PB-6</u> | <u>Units</u> |
|---------------------|---------------|-------------|-------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 01/23/01 | 01/23/01 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>PB-5</u> | <u>PB-6</u> | <u>Units</u> |
|---|-------------|-------------|--------------|
| Hydrocarbons (C8-C40) | 5.7 | 1.8 | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| o-Terphenyl | 48 | 106 | 38-133 |
| Date Prepared | 01/23/01 | 01/23/01 | |
| Date Analyzed | 01/25/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

| | <u>PB-7</u> | <u>PB-8</u> | <u>Units</u> |
|---------------------------|----------------|----------------|---------------|
| Dichlorodifluoromethane | 500 U D4 | 1.0 U | µg/L |
| Chloromethane | 500 U D4 | 1.0 U | µg/L |
| Vinyl Chloride | 500 U D4 | 1.0 U | µg/L |
| Bromomethane | 500 U D4 | 1.0 U | µg/L |
| Chloroethane | 500 U D4 | 1.0 U | µg/L |
| Trichlorofluoromethane | 1000 U D4 | 2.0 U | µg/L |
| 1,1-Dichloroethene | 500 U D4 | 1.0 U | µg/L |
| Methylene Chloride | 2500 U D4 | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 500 U D4 | 1.0 U | µg/L |
| 1,1-Dichloroethane | 500 U D4 | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 500 U D4 | 1.0 U | µg/L |
| Chloroform | 500 U D4 | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 500 U D4 | 1.0 U | µg/L |
| Carbon Tetrachloride | 500 U D4 | 1.0 U | µg/L |
| 1,2-Dichloroethane | 500 U D4 | 1.0 U | µg/L |
| Trichloroethene | 500 U D4 | 1.0 U | µg/L |
| 1,2-Dichloropropane | 500 U D4 | 1.0 U | µg/L |
| Bromodichloromethane | 500 U D4 | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 500 U D4 | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 500 U D4 | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 500 U D4 | 1.0 U | µg/L |
| Tetrachloroethene | 500 U D4 | 1.0 U | µg/L |
| Dibromochloromethane | 500 U D4 | 1.0 U | µg/L |
| Chlorobenzene | 500 U D4 | 1.0 U | µg/L |
| Bromoform | 500 U D4 | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 500 U D4 | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 500 U D4 | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 500 U D4 | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 500 U D4 | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 106 | 107 | 37-161 |
| Date Analyzed | 01/25/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.
D4 = Analyte value determined from a 1:500 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

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EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>PB-7</u> | <u>PB-8</u> | <u>Units</u> |
|-------------------------|----------------|----------------|---------------|
| Methyl tert-butyl ether | 1000 U D4 | 2.0 U | µg/L |
| Benzene | 500 U D4 | 1.0 U | µg/L |
| Toluene | 500 U D4 | 1.0 U | µg/L |
| Chlorobenzene | 500 U D4 | 1.0 U | µg/L |
| Ethylbenzene | 500 U D4 | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 500 U D4 | 1.0 U | µg/L |
| o-Xylene | 500 U D4 | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 500 U D4 | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 500 U D4 | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 500 U D4 | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 111 | 111 | 52-147 |
| Date Analyzed | 01/25/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.
D4 = Analyte value determined from a 1:500 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

| | <u>PB-7</u> | | <u>PB-8</u> | <u>Units</u> |
|------------------------|-------------|----|-------------|--------------|
| Naphthalene | 96 | D6 | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | | 1.0 U | µg/L |
| 1-Methylnaphthalene | 390 | D6 | 1.0 U | µg/L |
| 2-Methylnaphthalene | 530 | D6 | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | | 0.50 U | µg/L |
| Fluorene | 0.10 U | | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | | 1.0 U | µg/L |
| Anthracene | 0.20 U | | 0.20 U | µg/L |
| Fluoranthene | 20 | | 0.19 | µg/L |
| Pyrene | 5.8 | | 0.14 | µg/L |
| Benzo(a)anthracene | 0.62 | | 0.10 U | µg/L |
| Chrysene | 0.55 | | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.26 | | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|--|----------------|---------------|
| p-terphenyl | 94 | | 84 | 43-148 |
| Date Prepared | 01/22/01 | | 01/22/01 | |
| Date Analyzed | 01/24/01 | | 01/24/01 | |

EPA METHOD 504 -

ETHYLENE DIBROMIDE

| | <u>PB-7</u> | | <u>PB-8</u> | <u>Units</u> |
|--------------------|-------------|--|-------------|--------------|
| Ethylene Dibromide | 0.020 U | | 0.020 U | µg/L |
| Date Prepared | 01/23/01 | | 01/23/01 | |
| Date Analyzed | 01/23/01 | | 01/23/01 | |

U = Compound was analyzed for but not detected to the level shown.
D6 = Analyte value determined from a 1:20 dilution.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB-7</u> | <u>PB-8</u> | <u>Units</u> |
|---------------------|---------------|-------------|-------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 01/23/01 | 01/23/01 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>PB-7</u> | <u>PB-8</u> | <u>Units</u> |
|---|-------------|-------------|--------------|
| Hydrocarbons (C8-C40) | 130 D5 | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| o-Terphenyl | * | 107 | 38-133 |
| Date Prepared | 01/23/01 | 01/23/01 | |
| Date Analyzed | 01/26/01 | 01/25/01 | |

* = Surrogate recovery unavailable due to sample dilution.

U = Compound was analyzed for but not detected to the level shown.

D5 = Analyte value determined from a 1:50 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

| | <u>PB-9</u> | <u>TB-1</u> | <u>Units</u> |
|---------------------------|----------------|----------------|---------------|
| Dichlorodifluoromethane | 500 U D4 | 500 U D4 | µg/L |
| Chloromethane | 500 U D4 | 500 U D4 | µg/L |
| Vinyl Chloride | 500 U D4 | 500 U D4 | µg/L |
| Bromomethane | 500 U D4 | 500 U D4 | µg/L |
| Chloroethane | 500 U D4 | 500 U D4 | µg/L |
| Trichlorofluoromethane | 1000 U D4 | 1000 U D4 | µg/L |
| 1,1-Dichloroethene | 500 U D4 | 500 U D4 | µg/L |
| Methylene Chloride | 2500 U D4 | 2500 U D4 | µg/L |
| t-1,2-Dichloroethene | 500 U D4 | 500 U D4 | µg/L |
| 1,1-Dichloroethane | 500 U D4 | 500 U D4 | µg/L |
| c-1,2-Dichloroethene | 500 U D4 | 500 U D4 | µg/L |
| Chloroform | 500 U D4 | 500 U D4 | µg/L |
| 1,1,1-Trichloroethane | 500 U D4 | 500 U D4 | µg/L |
| Carbon Tetrachloride | 500 U D4 | 500 U D4 | µg/L |
| 1,2-Dichloroethane | 500 U D4 | 500 U D4 | µg/L |
| Trichloroethene | 500 U D4 | 500 U D4 | µg/L |
| 1,2-Dichloropropane | 500 U D4 | 500 U D4 | µg/L |
| Bromodichloromethane | 500 U D4 | 500 U D4 | µg/L |
| c-1,3-Dichloropropene | 500 U D4 | 500 U D4 | µg/L |
| t-1,3-Dichloropropene | 500 U D4 | 500 U D4 | µg/L |
| 1,1,2-Trichloroethane | 500 U D4 | 500 U D4 | µg/L |
| Tetrachloroethene | 500 U D4 | 500 U D4 | µg/L |
| Dibromochloromethane | 500 U D4 | 500 U D4 | µg/L |
| Chlorobenzene | 500 U D4 | 500 U D4 | µg/L |
| Bromoform | 500 U D4 | 500 U D4 | µg/L |
| 1,1,2,2-Tetrachloroethane | 500 U D4 | 500 U D4 | µg/L |
| 1,3-Dichlorobenzene | 500 U D4 | 500 U D4 | µg/L |
| 1,4-Dichlorobenzene | 500 U D4 | 500 U D4 | µg/L |
| 1,2-Dichlorobenzene | 500 U D4 | 500 U D4 | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 103 | 100 | 37-161 |
| Date Analyzed | 01/25/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.
D4 = Analyte value determined from a 1:500 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

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PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>PB-9</u> | <u>TB-1</u> | <u>Units</u> |
|-------------------------|----------------|----------------|---------------|
| Methyl tert-butyl ether | 1000 U D4 | 1000 U D4 | µg/L |
| Benzene | 500 U D4 | 500 U D4 | µg/L |
| Toluene | 500 U D4 | 500 U D4 | µg/L |
| Chlorobenzene | 500 U D4 | 500 U D4 | µg/L |
| Ethylbenzene | 500 U D4 | 500 U D4 | µg/L |
| m-Xylene & p-Xylene | 500 U D4 | 500 U D4 | µg/L |
| o-Xylene | 500 U D4 | 500 U D4 | µg/L |
| 1,3-Dichlorobenzene | 500 U D4 | 500 U D4 | µg/L |
| 1,4-Dichlorobenzene | 500 U D4 | 500 U D4 | µg/L |
| 1,2-Dichlorobenzene | 500 U D4 | 500 U D4 | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 108 | 108 | 52-147 |
| Date Analyzed | 01/25/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.
D4 = Analyte value determined from a 1:500 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

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REFERENCE : 2624

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>PB-9</u> | | <u>TB-1</u> | <u>Units</u> |
|------------------------|----------------|----|----------------|---------------|
| Naphthalene | 3.3 | | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | | 1.0 U | µg/L |
| 1-Methylnaphthalene | 780 | D5 | 860 | D5 µg/L |
| 2-Methylnaphthalene | 1000 | D5 | 1300 | D5 µg/L |
| Acenaphthene | 0.50 U | | 0.50 U | µg/L |
| Fluorene | 0.10 U | | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | | 1.0 U | µg/L |
| Anthracene | 0.20 U | | 0.20 U | µg/L |
| Fluoranthene | 16 | | 12 | µg/L |
| Pyrene | 20 | | 7.2 | µg/L |
| Benzo(a)anthracene | 3.0 | | 0.43 | µg/L |
| Chrysene | 2.5 | | 0.10 | µg/L |
| Benzo(b)fluoranthene | 0.93 | | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.71 | | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.67 | | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.26 | | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.53 | | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.78 | | 0.10 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | | <u>% RECOV</u> | <u>LIMITS</u> |
| p-terphenyl | 140 | | 96 | 43-148 |
| Date Prepared | 01/22/01 | | 01/22/01 | |
| Date Analyzed | 01/24/01 | | 01/24/01 | |

EPA METHOD 504 -
ETHYLENE DIBROMIDE

| | <u>PB-9</u> | | <u>TB-1</u> | <u>Units</u> |
|--------------------|-------------|--|-------------|--------------|
| Ethylene Dibromide | 0.020 U | | 0.020 U | µg/L |
| Date Prepared | 01/23/01 | | 01/23/01 | |
| Date Analyzed | 01/23/01 | | 01/23/01 | |

U = Compound was analyzed for but not detected to the level shown.
D5 = Analyte value determined from a 1:50 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

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REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB-9</u> | <u>TB-1</u> | <u>Units</u> |
|---------------------|---------------|-------------|-------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0060 I | mg/L |
| Date Analyzed | | 01/23/01 | 01/23/01 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>PB-9</u> | <u>TB-1</u> | <u>Units</u> |
|-----------------------|-------------|-------------|--------------|
| Hydrocarbons (C8-C40) | 170 D5 | 190 D5 | mg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| o-Terphenyl | * | * | 38-133 |
| Date Prepared | 01/23/01 | 01/23/01 | |
| Date Analyzed | 01/26/01 | 01/26/01 | |

* = Surrogate recovery unavailable due to sample dilution.
 U = Compound was analyzed for but not detected to the level shown.
 I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).
 D5 = Analyte value determined from a 1:50 dilution.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 601 -

VOLATILE HALOCARBONS

| | <u>TB-2</u> | <u>TB-3</u> | <u>Units</u> |
|---------------------------|-------------|-------------|--------------|
| Dichlorodifluoromethane | 1.0 U | 500 U D4 | µg/L |
| Chloromethane | 1.0 U | 500 U D4 | µg/L |
| Vinyl Chloride | 1.0 U | 500 U D4 | µg/L |
| Bromomethane | 1.0 U | 500 U D4 | µg/L |
| Chloroethane | 1.0 U | 500 U D4 | µg/L |
| Trichlorofluoromethane | 2.0 U | 1000 U D4 | µg/L |
| 1,1-Dichloroethene | 1.0 U | 500 U D4 | µg/L |
| Methylene Chloride | 5.0 U | 2500 U D4 | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 500 U D4 | µg/L |
| 1,1-Dichloroethane | 1.0 U | 500 U D4 | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 500 U D4 | µg/L |
| Chloroform | 1.0 U | 500 U D4 | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 500 U D4 | µg/L |
| Carbon Tetrachloride | 1.0 U | 500 U D4 | µg/L |
| 1,2-Dichloroethane | 1.0 U | 500 U D4 | µg/L |
| Trichloroethene | 1.0 U | 500 U D4 | µg/L |
| 1,2-Dichloropropene | 1.0 U | 500 U D4 | µg/L |
| Bromodichloromethane | 1.0 U | 500 U D4 | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 500 U D4 | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 500 U D4 | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 500 U D4 | µg/L |
| Tetrachloroethene | 1.0 U | 500 U D4 | µg/L |
| Dibromochloromethane | 1.0 U | 500 U D4 | µg/L |
| Chlorobenzene | 1.0 U | 500 U D4 | µg/L |
| Bromoform | 1.0 U | 500 U D4 | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 500 U D4 | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 500 U D4 | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 500 U D4 | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 500 U D4 | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|----------------|---------------|
| Bromofluorobenzene | 88 | 108 | 37-161 |
| Date Analyzed | 01/30/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.
D4 = Analyte value determined from a 1:500 dilution.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>TB-2</u> | <u>TB-3</u> | <u>Units</u> |
|-------------------------|----------------|----------------|---------------|
| Methyl tert-butyl ether | 2.0 U | 1000 U D4 | µg/L |
| Benzene | 1.0 U | 500 U D4 | µg/L |
| Toluene | 1.0 U | 500 U D4 | µg/L |
| Chlorobenzene | 1.0 U | 500 U D4 | µg/L |
| Ethylbenzene | 1.0 U | 500 U D4 | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 500 U D4 | µg/L |
| o-Xylene | 1.0 U | 500 U D4 | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 500 U D4 | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 500 U D4 | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 500 U D4 | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 110 | 108 | 52-147 |
| Date Analyzed | 01/30/01 | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.
D4 = Analyte value determined from a 1:500 dilution.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>TB-2</u> | <u>TB-3</u> | <u>Units</u> |
|------------------------|-------------|-------------|--------------|
| Naphthalene | 0.65 | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 5.0 | 820 D5 | µg/L |
| 2-Methylnaphthalene | 6.9 | 1200 D5 | µg/L |
| Acenaphthene | 0.50 U | 0.50 U | µg/L |
| Fluorene | 0.10 U | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 0.30 | 5.9 | µg/L |
| Pyrene | 0.27 | 6.4 | µg/L |
| Benzo(a)anthracene | 0.10 U | 0.43 | µg/L |
| Chrysene | 0.10 U | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| p-terphenyl | 100 | 86 | 43-148 |
| Date Prepared | 01/22/01 | 01/22/01 | |
| Date Analyzed | 01/24/01 | 01/24/01 | |

EPA METHOD 504 -
ETHYLENE DIBROMIDE

| | <u>TB-2</u> | <u>TB-3</u> | <u>Units</u> |
|--------------------|-------------|-------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 01/23/01 | 01/23/01 | |
| Date Analyzed | 01/23/01 | 01/23/01 | |

U = Compound was analyzed for but not detected to the level shown.
D5 = Analyte value determined from a 1:50 dilution.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TB-2</u> | <u>TB-3</u> | <u>Units</u> |
|---------------------|---------------|-------------|-------------|--------------|
| Lead | 200.7 | 0.010 | 0.0050 U | mg/L |
| Date Analyzed | | 01/23/01 | 01/23/01 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TB-2</u> | <u>TB-3</u> | <u>Units</u> |
|---|-------------|-------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | 160 D5 | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| o-Terphenyl | 111 | 0 U | 38-133 |
| Date Prepared | 01/23/01 | 01/23/01 | |
| Date Analyzed | 01/25/01 | 01/26/01 | |

U = Compound was analyzed for but not detected to the level shown.
D5 = Analyte value determined from a 1:50 dilution.

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RESULTS OF ANALYSIS

EPA METHOD 601 -

VOLATILE HALOCARBONS

TB-4

TB-5

Units

| | | | |
|---------------------------|----------|---------|------|
| Dichlorodifluoromethane | 5.0 U D1 | 10 U D2 | µg/L |
| Chloromethane | 5.0 U D1 | 10 U D2 | µg/L |
| Vinyl Chloride | 5.0 U D1 | 10 U D2 | µg/L |
| Bromomethane | 5.0 U D1 | 10 U D2 | µg/L |
| Chloroethane | 5.0 U D1 | 10 U D2 | µg/L |
| Trichlorofluoromethane | 10 U D1 | 20 U D2 | µg/L |
| 1,1-Dichloroethene | 5.0 U D1 | 10 U D2 | µg/L |
| Methylene Chloride | 25 U D1 | 50 U D2 | µg/L |
| t-1,2-Dichloroethene | 5.0 U D1 | 10 U D2 | µg/L |
| 1,1-Dichloroethane | 5.0 U D1 | 10 U D2 | µg/L |
| c-1,2-Dichloroethene | 5.0 U D1 | 10 U D2 | µg/L |
| Chloroform | 5.0 U D1 | 10 U D2 | µg/L |
| 1,1,1-Trichloroethane | 5.0 U D1 | 10 U D2 | µg/L |
| Carbon Tetrachloride | 5.0 U D1 | 10 U D2 | µg/L |
| 1,2-Dichloroethane | 5.0 U D1 | 10 U D2 | µg/L |
| Trichloroethene | 5.0 U D1 | 10 U D2 | µg/L |
| 1,2-Dichloropropane | 5.0 U D1 | 10 U D2 | µg/L |
| Bromodichloromethane | 5.0 U D1 | 10 U D2 | µg/L |
| c-1,3-Dichloropropene | 5.0 U D1 | 10 U D2 | µg/L |
| t-1,3-Dichloropropene | 5.0 U D1 | 10 U D2 | µg/L |
| 1,1,2-Trichloroethane | 5.0 U D1 | 10 U D2 | µg/L |
| Tetrachloroethene | 5.0 U D1 | 10 U D2 | µg/L |
| Dibromochloromethane | 5.0 U D1 | 10 U D2 | µg/L |
| Chlorobenzene | 5.0 U D1 | 10 U D2 | µg/L |
| Bromoform | 5.0 U D1 | 10 U D2 | µg/L |
| 1,1,2,2-Tetrachloroethane | 5.0 U D1 | 10 U D2 | µg/L |
| 1,3-Dichlorobenzene | 5.0 U D1 | 10 U D2 | µg/L |
| 1,4-Dichlorobenzene | 5.0 U D1 | 10 U D2 | µg/L |
| 1,2-Dichlorobenzene | 5.0 U D1 | 10 U D2 | µg/L |

Surrogate:

% RECOV

% RECOV

LIMITS

Bromofluorobenzene

108

94

37-161

Date Analyzed

01/30/01

01/30/01

U = Compound was analyzed for but not detected to the level shown.

D1 = Analyte value determined from a 1:5 dilution.

D2 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>TB-4</u> | <u>TB-5</u> | <u>Units</u> |
|-------------------------|----------------|----------------|---------------|
| Methyl tert-butyl ether | 10 U D1 | 20 U D2 | µg/L |
| Benzene | 5.0 U D1 | 10 U D2 | µg/L |
| Toluene | 5.0 U D1 | 10 U D2 | µg/L |
| Chlorobenzene | 5.0 U D1 | 10 U D2 | µg/L |
| Ethylbenzene | 5.0 U D1 | 10 U D2 | µg/L |
| m-Xylene & p-Xylene | 5.0 U D1 | 10 U D2 | µg/L |
| o-Xylene | 5.0 U D1 | 10 U D2 | µg/L |
| 1,3-Dichlorobenzene | 5.0 U D1 | 10 U D2 | µg/L |
| 1,4-Dichlorobenzene | 5.0 U D1 | 10 U D2 | µg/L |
| 1,2-Dichlorobenzene | 5.0 U D1 | 10 U D2 | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 122 | 113 | 52-147 |
| Date Analyzed | 01/30/01 | 01/30/01 | |

U = Compound was analyzed for but not detected to the level shown.

D1 = Analyte value determined from a 1:5 dilution.

D2 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>TB-4</u> | | <u>TB-5</u> | <u>Units</u> |
|--------------------------|----------------|--|----------------|---------------|
| Naphthalene | 40 | | 50 U D7 | µg/L |
| Acenaphthylene | 1.0 U | | 100 U D7 | µg/L |
| 1-Methylnaphthalene | 190 D2 | | 4800 D7 | µg/L |
| 2-Methylnaphthalene | 240 D2 | | 7200 D3 | µg/L |
| Acenaphthene | 0.50 U | | 50 U D7 | µg/L |
| Fluorene | 0.10 U | | 10 U D7 | µg/L |
| Phenanthrene | 1.0 U | | 100 U D7 | µg/L |
| Anthracene | 0.20 U | | 20 U D7 | µg/L |
| Fluoranthene | 3.8 | | 280 D7 | µg/L |
| Pyrene | 2.2 | | 89 D7 | µg/L |
| Benzo (a) anthracene | 0.16 | | 10 U D7 | µg/L |
| Chrysene | 0.20 | | 10 U D7 | µg/L |
| Benzo (b) fluoranthene | 0.10 U | | 10 U D7 | µg/L |
| Benzo (k) fluoranthene | 0.10 U | | 10 U D7 | µg/L |
| Benzo (a) pyrene | 0.10 U | | 10 U D7 | µg/L |
| Dibenzo (a,h) anthracene | 0.10 U | | 10 U D7 | µg/L |
| Benzo (g,h,i) perylene | 0.10 U | | 10 U D7 | µg/L |
| Indeno (1,2,3-cd) pyrene | 0.10 U | | 10 U D7 | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | | <u>% RECOV</u> | <u>LIMITS</u> |
| p-terphenyl | 92 | | 0 U | 43-148 |
| Date Prepared | 01/22/01 | | 01/22/01 | |
| Date Analyzed | 01/24/01 | | 01/24/01 | |

U = Compound was analyzed for but not detected to the level shown.
D2 = Analyte value determined from a 1:10 dilution.
D3 = Analyte value determined from a 1:1000 dilution.
D7 = Analyte value determined from a 1:100 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

EPA METHOD 504 -
ETHYLENE DIBROMIDE

| | <u>TB-4</u> | <u>TB-5</u> | <u>Units</u> |
|--------------------|-------------|-------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 01/23/01 | 01/23/01 | |
| Date Analyzed | 01/23/01 | 01/24/01 | |

TOTAL METALS

METHOD

TB-4

TB-5

Units

| | | | | |
|---------------|-------|----------|----------|------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 01/23/01 | 01/24/01 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

TB-4

TB-5

Units

| | | | | |
|-----------------------|-----|-----|----|------|
| Hydrocarbons (C8-C40) | 9.9 | 430 | D5 | mg/L |
|-----------------------|-----|-----|----|------|

Surrogate:

% RECOV

% RECOV

LIMITS

| | | | | |
|---------------|----------|----------|--|--------|
| o-Terphenyl | 94 | * | | 38-133 |
| Date Prepared | 01/23/01 | 01/23/01 | | |
| Date Analyzed | 01/25/01 | 01/26/01 | | |

* = Surrogate recovery unavailable due to sample dilution.

U = Compound was analyzed for but not detected to the level shown.

D5 = Analyte value determined from a 1:50 dilution.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

| | <u>LAB BLANK</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------------|------------------|------------------|---------------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 5.0 U | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 103 | 77 | 37-161 |
| Date Analyzed | 01/24/01 | 01/27/01 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>LAB BLANK</u> | <u>LAB BLANK</u> | <u>Units</u> |
|-------------------------|------------------|------------------|---------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 1.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 112 | 101 | 52-147 |
| Date Analyzed | 01/24/01 | 01/27/01 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

LAB BLANK

Units

| | | |
|------------------------|--------|------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:

% RECOV

LIMITS

| | | |
|---------------|----------|--------|
| p-terphenyl | 85 | 43-148 |
| Date Prepared | 01/22/01 | |
| Date Analyzed | 01/23/01 | |

EPA METHOD 504 -

ETHYLENE DIBROMIDE

LAB BLANK

Units

| | | |
|--------------------|----------|------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Prepared | 01/23/01 | |
| Date Analyzed | 01/23/01 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------|---------------|------------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 01/23/01 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---|------------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| o-Terphenyl | 84 | 38-133 |
| Date Prepared | 01/23/01 | |
| Date Analyzed | 01/25/01 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

LAB BLANK

Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

% RECOV

LIMITS

Bromofluorobenzene
Date Analyzed

104
01/30/01

37-161

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

LAB BLANK

Units

Methyl tert-butyl ether
Benzene
Toluene
Chlorobenzene
Ethylbenzene
m-Xylene & p-Xylene
o-Xylene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene

2.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U

µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L

Surrogate:

% RECOV

LIMITS

Bromofluorobenzene
Date Analyzed

98
01/30/01

52-147

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 601</u> | | | | |
| Methylene Chloride | 98/120/132 | 45-161 | 20 | 29 |
| Chloroform | 118/112/117 | 64-154 | 5 | 16 |
| Carbon Tetrachloride | 108/104/126 | 71-165 | 4 | 21 |
| Trichloroethene | 90/ 92/ 97 | 69-158 | 2 | 24 |
| Tetrachloroethene | 102/ 93/121 | 63-166 | 9 | 21 |
| Chlorobenzene | 88/ 94/103 | 67-147 | 6 | 19 |
| <u>EPA Method 602</u> | | | | |
| Benzene | 103/100/101 | 60-138 | 3 | 17 |
| Toluene | 106/103/ 99 | 57-138 | 3 | 16 |
| Ethylbenzene | 112/109/106 | 49-144 | 3 | 17 |
| o-Xylene | 112/104/128 | 50-151 | 7 | 17 |
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 68/ 75/ 64 | 59-111 | 10 | 12 |
| Acenaphthene | 74/ 88/ 74 | 58-128 | #17 | 13 |
| Benzo(a)pyrene | 78/ 80/ 83 | 78-134 | 2 | 15 |
| Benzo(g,h,i)perylene | 88/ 95/ 81 | 62-115 | 8 | 30 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

= One or more of the associated value failed to meet laboratory established limits for precision.

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

ENCO LABORATORIES

REPORT # : JAX15380

DATE REPORTED: January 31, 2001

REFERENCE : 2624

PROJECT NAME : MAYPORT AST CLOSURE

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|------------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 504</u> | | | | |
| Ethylene Dibromide | 96/ 96/104 | 57-130 | <1 | 18 |
| Dibromochloropropane | 104/104/ 80 | 60-130 | <1 | 20 |
| <u>TOTAL METALS</u> | | | | |
| Lead, 200.7 | 100/ 99/ 99 | 68-126 | 1 | 19 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 93/ 87/ 72 | 51-163 | 7 | 27 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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LIMITED CLOSURE SUMMARY REPORT

**Mayport Naval Station Fuel Depot
Tank # 203
Mayport Naval Station, Duval County, Florida
Facility ID # 8626008**

Prepared for:

Environmental Recovery, Inc.
251 Levy Road
Atlantic Beach, Florida 32233

Prepared by:

Environmental Science Associates, Inc.
35 Jefferson Avenue
Ponte Vedra, Florida 32802
CompQAP #970173

August 2000

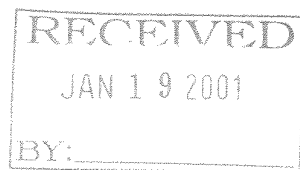


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Department of Environmental Protection

Twin Towers Office Building ♦ 2600 Blair Stone Road ♦ Tallahassee, Florida 32399-2400

DEP Form 62-761.900(8)
Form Title: Limited Closure
Summary Report
Effective Date: 7/13/98

Limited Closure Summary Report

This form is required for facilities that have sites with documented contamination requiring a site assessment in accordance with Chapter 62-770, F.A.C. This includes those facilities that are eligible for the Early Detection Incentive Program (EDI), the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP), and the Petroleum Cleanup Participation Program (PCPP), pursuant to Sections 376.3071 and 376.3072, F.S. Documentation of procedures followed, and results obtained during closure shall be reported in this form, along with any attachments. This form shall be submitted to the County within 60 days of completion of the closure in accordance with Section A of the "Storage Tank System Closure Assessment Requirements."

Complete All Applicable Blanks. Please Print or Type

General Information

| | | |
|--|--|-----------------------------|
| Date <u>6/01/00</u> | FDEP Facility ID Number <u>2626008</u> | County <u>Deval</u> |
| Facility Name <u>Mayport Naval Station, Tank # 203</u> | | Facility Telephone #: () |
| Facility Address: <u>Mayport Naval Station, Mayport, Florida</u> | | |
| Owner or Operator Name: <u>U.S. Navy</u> | | Owner/Operator phone #: () |
| Mailing Address: | | |

Storage Tank System Closure Information

1. Were the storage tanks(s): (Check one or both)

• Aboveground

• Underground ☒

2. General System Information

Types of Products Stored: VEHICULAR DIESEL

Number of Tanks Closed ONE

Age(s) of Tanks 35 yrs

3. Was the Limited Closure Summary Report Performed as a Result of: (check one or more)

• Tank Systems Removal? ☒

• Spill Containment Installation?

• Change in Storage to a Non-Regulated Substance?

• Tank Systems Closed in Place?

• Dispenser Liners Installation?

• Release Prevention Barrier Installation?

• Piping Sump Installation?

• Secondary Containment Installation?

• Other? (please explain)

4. Please Check Yes or No to the following:

| | | |
|---|---|--|
| a. Was there previously reported contamination discovered on site? If yes, was | • Yes | • No |
| 1. A Discharge Report Form submitted to the County? | • Yes | • No |
| 2. An investigation performed in accordance with Rule 62-761.820, F.A.C.? | • Yes | • No |
| b. Is the depth to groundwater less than 20 feet? | • Yes <input checked="" type="checkbox"/> | • No |
| c. Are there monitoring wells on site? If yes, were they | • Yes <input checked="" type="checkbox"/> | • No |
| 1. Groundwater monitoring wells? | • Yes <input checked="" type="checkbox"/> | • No |
| 2. Vapor monitoring wells? | • Yes | • No <input checked="" type="checkbox"/> |
| 3. Used for closure assessment sampling? | • Yes | • No <input checked="" type="checkbox"/> |
| 4. Properly closed? | • Yes | • No <input checked="" type="checkbox"/> |
| 5. Retained for site assessment purposes? | • Yes <input checked="" type="checkbox"/> | • No |
| d. If tanks were replaced, were contaminated soils returned to the tank excavation? | • Yes | • No <input checked="" type="checkbox"/> |

Signature of owner or operator

Signature of person performing
Limited Closure Assessment

Name of person performing
Limited Closure Assessment

(date)

(date)

6/1/00

Affiliation

EXX, Inc.

Printed on recycled paper.

LIMITED CLOSURE SUMMARY REPORT

**Mayport Naval Station Fuel Depot
Tank # 203
Mayport Naval Station, Duval County, Florida
Facility ID # 8626008**

Summary of Field Activities

Environmental Science Associates, Inc. (ESA) was contracted by Environmental Recovery, Inc. (ERI) of Atlantic Beach, Florida (PSSSC #PC-C050751) to perform limited closure assessment services following the removal of a diesel fuel Underground Storage Tank (UST) from the Fuel Depot facility (Facility ID #8626008) located on Mayport Naval Station in Duval County, Florida (refer to Figure 1., Site Location Map). The purpose of the limited closure summary was to evaluate current subsurface site conditions in the vicinity of the tank. Field activities for the limited closure assessment were conducted on May 30, 31 and June 1, 2000.

Tank 203 is identified on the FDEP Storage Tank registration information as a 1,555,000-gallon bulk vehicular diesel fuel UST, with a reported installation date of 7/1964. The tank had been previously dismantled and removed from the site, with the circular concrete tank pad, measuring 100 ft in diameter, remaining in place. The limited closure assessment activities were conducted following the removal of the tank, and was performed in accordance with the requirements of Chapter 62-761 F.A.C. and the Florida Department of Environmental Protection (FDEP) guidance document "Pollutant Storage Tank Closure Assessment Requirements" (April 1998) for sites with previously documented contamination. The methods and procedures used during the closure assessment were conducted in accordance with the FDEP "Quality Assurance Standard Operating Procedures for Petroleum Storage System Closure Assessments".

As part of the limited closure assessment, total of thirteen (13) confirmatory soil and groundwater were collected from soil borings conducted at the base of the former tank location. A total of eight (8) soil borings (soil boring locations # SB-P1 through SB-P8, with the 'P' designator used to identify sampling locations selected at the perimeter of the tank pad) were conducted at equidistant locations around the perimeter of the concrete tank pad; a total of four (4) additional soil borings (SB-9 through SB-12) were conducted at equidistant locations at the midpoint between the center of the concrete tank pad and the center point of the tank pad; and the remaining soil boring (SB-13) was conducted at the center of the tank pad. Site preparation activities included the use of a concrete core drill to remove a 5-inch diameter core from the 6-inch thick concrete tank pad at those sampling locations selected directly beneath the former tank location. Soil boring locations were selected around the perimeter of the tank pad using a compass heading of North for soil boring location SB-P1, and continuing at uniform intervals in a clockwise direction around the perimeter of the tank pad for soil boring locations #SB-P2 through SB-P8.

The soil borings were conducted using a stainless steel hand auger. Each of the borings were advanced to the depth of the water table, which was encountered at a depth of approximately 4 to 5 ft below surface grade in each of the soil borings. Soil samples were collected from each soil boring at the ground surface and at one foot intervals until the water table was encountered. These soil samples were screened for the presence of volatile organic hydrocarbon vapors by organic vapor headspace analysis field screening procedures using a Foxboro 128 Organic Vapor Analyzer/Flame Ionization Detector (OVA/FID). In this procedure, a clean 16-ounce, wide mouth glass jar is half-filled with the soil to be tested. The jar is then sealed with aluminum foil and allowed to equilibrate at ambient temperatures for a period of approximately five minutes. The probe of the OVA/FID is then inserted through the foil seal, and the concentration of volatile organic compounds in the headspace of the jar is read in parts per million (ppm). The instrument was calibrated in the field prior to sample collection using a standard of 95 parts per million (ppm) methane, and the samples were analyzed both with and without carbon filtration in order to detect and correct for the presence of naturally occurring organic vapors (i.e., methane). The results of the field screening were below 1 part per million total (corrected) volatile petroleum hydrocarbon vapors in each of the soil sampling locations.

A total of thirteen (13) confirmatory soil samples were collected, with one (1) soil sample collected from each of the thirteen soil borings conducted in proximity of the former tank location. Based on the results of the OVA soil screening, which indicated a lack of indications of volatile petroleum hydrocarbon vapors in the soil samples, as well as on a lack of apparent visual indications of the presence of contamination, each of the confirmatory soil samples were collected from a depth of approximately 1 foot above the water table, which was encountered at a depth of approximately 4.0 to 5.0 feet below the concrete base of the of the former tank.

Each of the confirmatory soil samples were collected using a stainless steel hand auger and Encore® brand samplers. Sampling equipment was decontaminated between sampling locations to prevent the possibility of cross-contamination. The samples were placed into pre-cleaned, laboratory supplied sample containers, appropriately labeled, sealed in zip-lock type bags and placed on wet ice for transport, and hand-delivered to a FDEP-approved laboratory (ENCO Laboratories, Jacksonville) for analysis by the following methods:

| | |
|-----------------|-----------------------------------|
| EPA Method 8021 | Volatile Organic Compounds |
| EPA Method 8310 | Polynuclear Aromatic Hydrocarbons |
| Fla-PRO | Total Petroleum Hydrocarbons |

The results of the laboratory analysis of the soil samples detected the presence of petroleum hydrocarbon compounds in seven (7) of the thirteen (13) confirmatory soil samples collected, including sample #'s CS-P4, CS-P6, CS-P7, CS-P8, CS-11, CS-12, and CS-13, with the highest concentrations detected in CS-P4. The soil contaminant concentrations detected in each of the soil samples were below the Florida Department of Environmental Protection (FDEP) Soil Cleanup Target Levels (SCTL) as specified in Chapter 62-775, F.A.C., Table II, in all samples, with the exception of soil sample #CS-P4. Concentrations of Polynuclear Aromatic Hydrocarbons detected

in confirmatory soil sample #CS-P4 exhibited concentrations of Benzo(a)anthracene (2.2mg/Kg) in excess of the Direct Exposure, Residential Soil Cleanup Target Level of 1.5mg/Kg, and Benzo(a)pyrene (1.0mg/Kg) in excess of the Direct Exposure, Residential Soil Cleanup Target Level of 0.1mg/Kg, as well as the Direct Exposure, Industrial Soil Cleanup Target Level of 0.5mg/Kg. All concentrations detected were below the applicable Leachability exposure guidelines specified by 62-775. The results of the soil analysis are summarized in Table 2, and soil sampling locations are illustrated in Figure 3. Copies of the laboratory reports of the confirmatory soil analysis are provided in Attachment A.

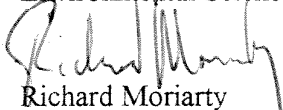
Following confirmatory soil sample collection, each of the thirteen (13) soil borings were advanced below the top of the water table and temporary monitor wells were installed and sampled. Each of the temporary wells (TMW-1 through TMW-13) were constructed of 2-inch PVC with 5 ft of 0.01.-inch slotted well screen, and was installed such that the well screen intercepted the top of the water table, which was encountered at a depth of approximately 4 to 5 ft below the concrete base of the tank. The annular space around the well screen was filled with clean 6/20 grade sand pack. Prior to sample collection, each temporary well was purged a total of five (5) standing volumes using a portable peristaltic pump utilizing the quiescent purging technique. Groundwater samples were collected from each temporary well using a Teflon bailer. Sample containers, which had been provided by the designated laboratory, were appropriately labeled, preserved, sealed in zip-lock type bags, placed on wet ice, and hand-delivered, under standard chain of custody procedures, to an FDEP-approved environmental laboratory (ENCO Laboratories, Jacksonville) for analysis for those parameters specified in the Kerosene Analytical Group, as follows:

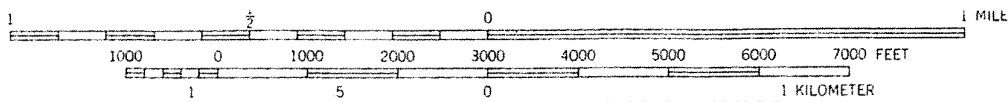
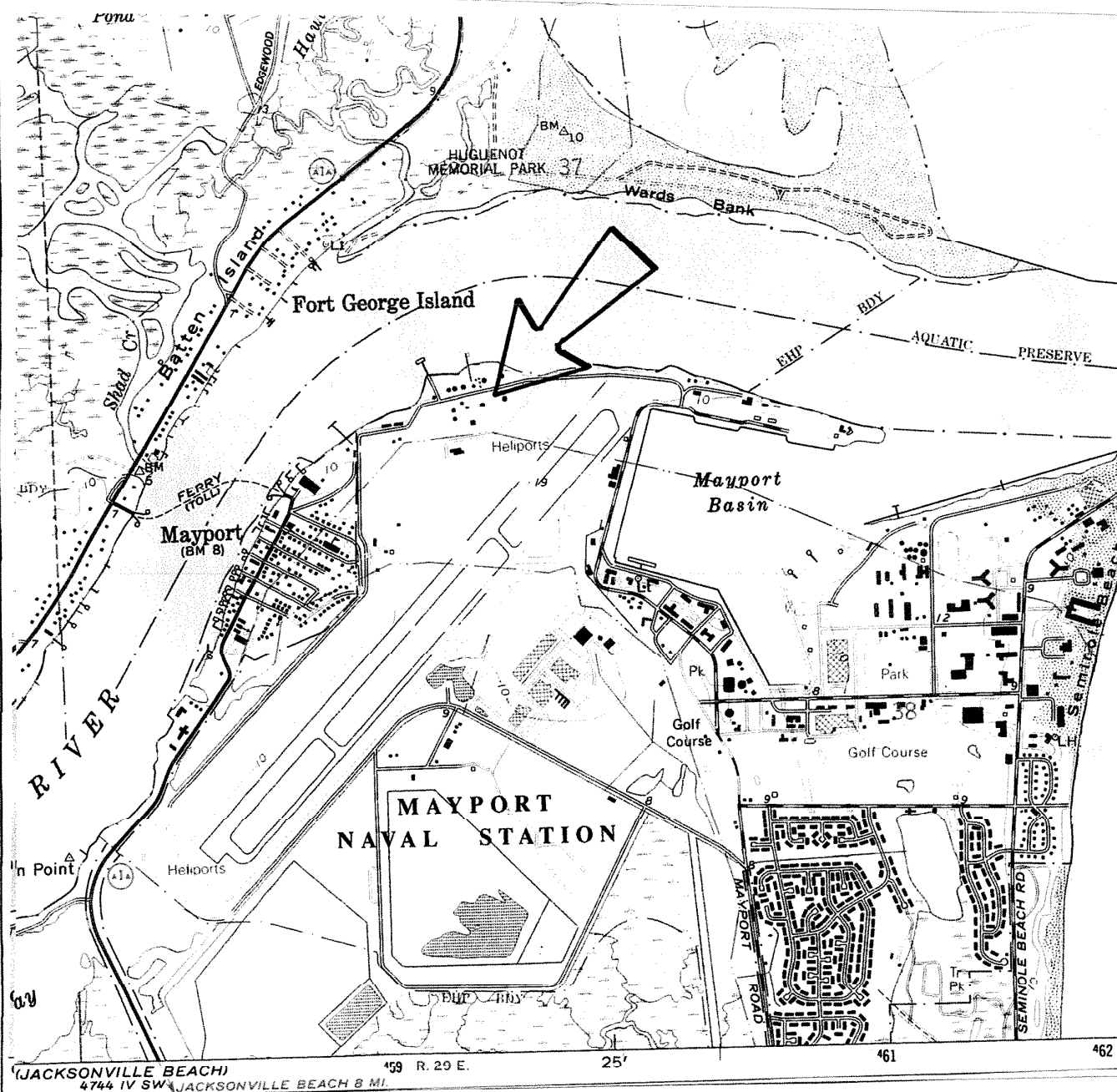
| | |
|------------------|-----------------------------------|
| EPA Method 8021 | Volatile Organic Compounds |
| EPA Method 8310 | Polynuclear Aromatic Hydrocarbons |
| Fla-PRO | Total Petroleum Hydrocarbons |
| EPA Method 504 | Ethylene dibromide (EDB) |
| EPA Method 200.7 | Total Lead |

The results of the laboratory analysis of the groundwater samples collected from the temporary monitor wells indicated concentrations of petroleum product chemicals of concern, including Polynuclear Aromatic Hydrocarbons, Lead, and/or Volatile Organic Compounds in five (5) of the thirteen (13) wells sampled; however, the concentrations of all contaminants of concern were detected at concentrations below the applicable groundwater guidance concentration as specified in Chapter 62-775, Table I (refer to Table 3). Polynuclear Aromatic Hydrocarbons were detected in temporary monitor wells #TMW-P1, TMW-P2, TMW-P3, TMW-P4, and TMW P5; Lead was detected in temporary monitor wells # TMW-1 (10µg/L), TMW-2 (11µg/L), and in TMW-P3 (8µg/L), and Tetrachloroethene was detected in Temporary monitor well # TMW-P3 (only), at a concentration of 2.0 µg/L. The results of the laboratory analysis of the groundwater samples collected from the temporary monitor wells are summarized in Table 3, and the temporary well locations are illustrated in Figure 2. Copies of the laboratory reports of the groundwater analysis are provided in Attachment A, and copies of the well sampling field logs are provided in Attachment B.

Included in this limited closure summary report are copies of the laboratory reports of the soil and groundwater analysis, which are provided as Attachment A. Also included in the report is a site location map, a site sketch indicating soil and groundwater sampling locations relative to the former tank locations, as well as the results of the laboratory analysis in table form.

Respectfully Submitted,
Environmental Science Associates, Inc.


Richard Moriarty
Environmental Scientist



Environmental
Science
Associates, Inc.

**Site Location Map
Limited Closure Summary, Tank #203**

Mayport Naval Station Fuel Depot
Mayport Naval Station, Duval County, Florida; Facility ID #8626008

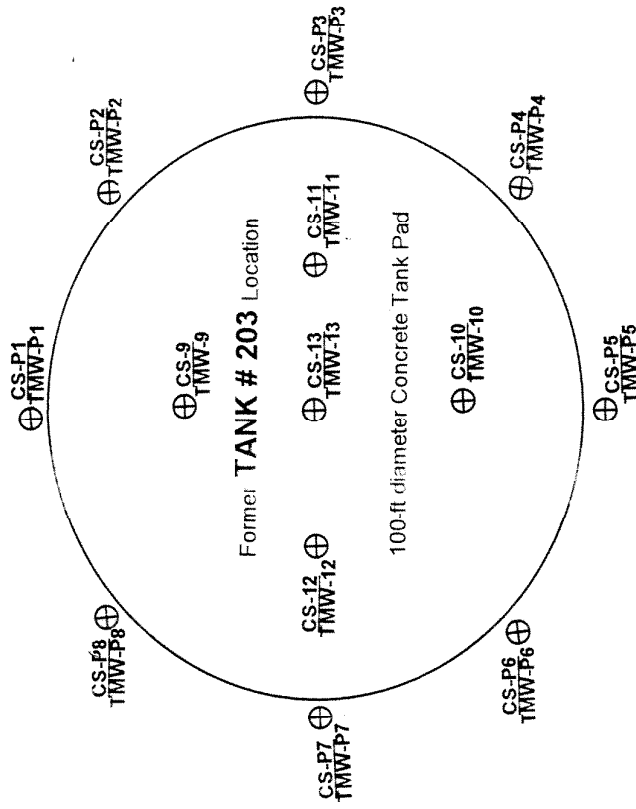
FIGURE

1

PROJECT NO.



ASHALT-PAVED ROADWAY



⊕ = Confirmatory Soil and Groundwater Sampling Locations



**Environmental
Science
Associates, Inc.**

Site Map Indicating Soil and Groundwater Sampling Locations

Mayport Naval Station Fuel Depot, Tank #203
Mayport Naval Station, Duval County, Florida
Facility ID # 8626008

FIGURE

2

PROJECT NO.

| DATE | INITIAL | DRAWN BY: | REVIEWED BY: | PROJECT MANAGER: |
|------|---------|-----------|--------------|------------------|
| | | | | |

Table 1. SUMMARY of OVA SOIL SCREENING RESULTS

Limited Closure Summary

Tank #203

Mayport Naval Station

Mayport, Duval County, Florida

Facility ID # 8626008

| Sample I.D. | Sample Depth (below grade) | <u>ORGANIC VAPOR CONCENTRATION</u> (in parts per million) | | | Remarks |
|--------------|----------------------------|--|----------|-------|--|
| | | Unfiltered | Filtered | Total | |
| SB-1: | | | | | North side of concrete tank pad, perimeter. |
| | Surficial | 0 | 0 | 0 | |
| | 1 foot below grade | 0 | 0 | 0 | |
| | 2 feet below grade | 0 | 0 | 0 | |
| | 3 feet below grade | 0 | 0 | 0 | |
| | 4 feet below grade | 0 | 0 | 0 | - water table @ 4.5 - 5.0 ft BG |
| SB-2: | | | | | Perimeter of concrete tank pad, NE. |
| | Surficial | 0 | 0 | 0 | |
| | 1 foot below grade | 0 | 0 | 0 | |
| | 2 feet below grade | 0 | 0 | 0 | |
| | 3 feet below grade | 0 | 0 | 0 | |
| | 4 feet below grade | 0 | 0 | 0 | - water table @ 4.5 - 5.0 ft BG |
| SB-3: | | | | | Perimeter of concrete tank pad, East. |
| | Surficial | 0 | 0 | 0 | |
| | 1 foot below grade | 0 | 0 | 0 | |
| | 2 feet below grade | 0 | 0 | 0 | |
| | 3 feet below grade | 0 | 0 | 0 | |
| | 4 feet below grade | 0 | 0 | 0 | - water table @ 4.5 - 5.0 ft BG |
| SB-4: | | | | | Perimeter of concrete tank pad, SE. |
| | Surficial | 0 | 0 | 0 | |
| | 1 foot below grade | 0 | 0 | 0 | |
| | 2 feet below grade | 0 | 0 | 0 | |
| | 3 feet below grade | 0 | 0 | 0 | |
| | 4 feet below grade | 0 | 0 | 0 | - water table @ 4.5 - 5.0 ft BG |
| SB-5: | | | | | Perimeter of concrete tank pad, South. |
| | Surficial | 0 | 0 | 0 | |
| | 1 foot below grade | 0 | 0 | 0 | |
| | 2 feet below grade | 0 | 0 | 0 | |
| | 3 feet below grade | 0 | 0 | 0 | |
| | 4 feet below grade | 0 | 0 | 0 | - water table @ 4.5 - 5.0 ft BG |
| SB-6: | | | | | Perimeter of concrete tank pad, SW. |
| | Surficial | 0 | 0 | 0 | |
| | 1 foot below grade | 0 | 0 | 0 | |
| | 2 feet below grade | 0 | 0 | 0 | |
| | 3 feet below grade | 0 | 0 | 0 | |
| | 4 feet below grade | 0 | 0 | 0 | - water table @ 4.5 - 5.0 ft BG |

Table 1., OVA Soil Screening Results, continued

| Sample I.D. | Sample Depth (below grade) | ORGANIC VAPOR CONCENTRATION (in parts per million) | | | Remarks |
|---------------|----------------------------|---|----------|-------|--|
| | | Unfiltered | Filtered | Total | |
| SB-7: | | | | | Perimeter of concrete tank pad, West. |
| | Surficial | 0 | 0 | 0 | |
| | 1 foot below grade | 0 | 0 | 0 | |
| | 2 feet below grade | 0 | 0 | 0 | |
| | 3 feet below grade | 0 | 0 | 0 | |
| | 4 feet below grade | 0 | 0 | 0 | - water table @ 4.5 - 5.0 ft BG |
| SB-8: | | | | | Perimeter of concrete tank pad, NW. |
| | Surficial | 0 | 0 | 0 | |
| | 1 foot below grade | 0 | 0 | 0 | |
| | 2 feet below grade | 0 | 0 | 0 | |
| | 3 feet below grade | 0 | 0 | 0 | |
| | 4 feet below grade | 0 | 0 | 0 | - water table @ 4.5 - 5.0 ft BG |
| SB-9: | | | | | Midpoint, north |
| | Surficial | 0 | 0 | 0 | |
| | 1 foot below grade | 0 | 0 | 0 | |
| | 2 feet below grade | 0 | 0 | 0 | |
| | 3 feet below grade | 0 | 0 | 0 | |
| | 4 feet below grade | 0 | 0 | 0 | - water table @ 4.5 - 5.0 ft BG |
| SB-10: | | | | | Midpoint, south. |
| | Surficial | 0 | 0 | 0 | |
| | 1 foot below grade | 0 | 0 | 0 | |
| | 2 feet below grade | 0 | 0 | 0 | |
| | 3 feet below grade | 0 | 0 | 0 | |
| | 4 feet below grade | 0 | 0 | 0 | - water table @ 4.5 - 5.0 ft BG |
| SB-11: | | | | | Midpoint, east. |
| | Surficial | 0 | 0 | 0 | |
| | 1 foot below grade | 0 | 0 | 0 | |
| | 2 feet below grade | 0 | 0 | 0 | |
| | 3 feet below grade | 0 | 0 | 0 | |
| | 4 feet below grade | 0 | 0 | 0 | - water table @ 4.5 - 5.0 ft BG |
| SB-12: | | | | | Midpoint, west. |
| | Surficial | 0 | 0 | 0 | |
| | 1 foot below grade | 0 | 0 | 0 | |
| | 2 feet below grade | 0 | 0 | 0 | |
| | 3 feet below grade | 0 | 0 | 0 | |
| | 4 feet below grade | 0 | 0 | 0 | - water table @ 4.5 - 5.0 ft BG |
| SB-13: | | | | | Center of concrete tank pad. |
| | Surficial | 0 | 0 | 0 | |
| | 1 foot below grade | 0 | 0 | 0 | |
| | 2 feet below grade | 0 | 0 | 0 | |
| | 3 feet below grade | 0 | 0 | 0 | |
| | 4 feet below grade | 0 | 0 | 0 | - water table @ 4.5 - 5.0 ft BG |

Field Meter: Foxboro 128 OVA/FID

Field Calibration Check: 5/30/00;10:50/ 5/31/00;08:50/6/1/00;09:15

Description of Procedures: OVA Soil Headspace Analysis

Table 2.
Summary of Laboratory Analysis
Confirmatory Soil Sampling
Mayport Naval Station Fuel Depot, Tank # 203
Mayport Naval Station, Duval County, Florida

| Parameter | Confirmatory Soil Sample ID | | | FDEP Soil Cleanup Target Levels* | | |
|---|-----------------------------|-------|-------|-------------------------------------|-------|-------|
| | CS-P1 | CS-P2 | CS-P3 | Residential Industrial Leachability | | |
| | | | | | | |
| Volatile Organic Compounds: | | | | | | |
| (EPA Method 8021) | | | | | | |
| Benzene | BDL | BDL | BDL | 1.1 | 0.6 | 0.007 |
| Toluene | BDL | BDL | BDL | 380 | 2600 | 0.5 |
| Ethylbenzene | BDL | BDL | BDL | 1100 | 8400 | 0.6 |
| Xylenes | BDL | BDL | BDL | 5900 | 40000 | 0.2 |
| MTBE | BDL | BDL | BDL | 3200 | 22000 | 0.5 |
| All Other 8021 Compounds | BDL | BDL | BDL | N/A | | |
| Polynuclear Aromatic Hydrocarbons: | | | | | | |
| (EPA Method 8310) | | | | | | |
| Naphthalene | BDL | BDL | BDL | 40 | 270 | 1.7 |
| Flourene | BDL | BDL | BDL | 2200 | 23000 | 160 |
| Phenanthrene | BDL | BDL | BDL | 2000 | 30000 | 250 |
| Flouranthrene | BDL | BDL | BDL | 2900 | 48000 | 1200 |
| Pyrene | BDL | BDL | BDL | 2200 | 37000 | 880 |
| Benzo(a)anthracene | BDL | BDL | BDL | 1.5 | 5 | 3.2 |
| Benzo(b)Flouranthene | BDL | BDL | BDL | 1.4 | 4.8 | 10 |
| Benzo(a)pyrene | BDL | BDL | BDL | 0.1 | 0.5 | 8 |
| Benzo(g,h,i,)perylene | BDL | BDL | BDL | 2300 | 41000 | 32000 |
| Chrysene | BDL | BDL | BDL | 140 | 450 | 77 |
| Dibenzo(a,h)anthracene | BDL | BDL | BDL | 0.1 | 0.5 | 30 |
| Indeno(1,2,3-cd)pyrene | BDL | BDL | BDL | 1.5 | 5.3 | 28 |
| All other 8310 Compounds | BDL | BDL | BDL | N/A | | |
| FLA PRO: | BDL | BDL | BDL | 340 | 2500 | 340 |

Concentrations in mg/Kg

BDL = Below Detection Limits; N/A = Not Applicable

*Soil Cleanup Target Levels as per 62-775 F.A.C., Table II, Direct Exposure, Industrial Use Assumption/Leachability

Table 2, continued.
Summary of Laboratory Analysis
Confirmatory Soil Sampling
Mayport Naval Station Fuel Depot, Tank # 203
Mayport Naval Station, Duval County, Florida

| Parameter | Confirmatory Soil Sample ID | | | FDEP Soil Cleanup Target Levels* | | |
|---|-----------------------------|-------|-------|-------------------------------------|-------|-------|
| | CS-P4 | CS-P5 | CS-P6 | Residential Industrial Leachability | | |
| Volatile Organic Compounds: | | | | | | |
| (EPA Method 8021) | | | | | | |
| Benzene | BDL | BDL | BDL | 1.1 | 0.6 | 0.007 |
| Toluene | BDL | BDL | BDL | 380 | 2600 | 0.5 |
| Ethylbenzene | BDL | BDL | BDL | 1100 | 8400 | 0.6 |
| Xylenes | BDL | BDL | BDL | 5900 | 40000 | 0.2 |
| MTBE | BDL | BDL | BDL | 3200 | 22000 | 0.5 |
| All Other 8021 Compounds | BDL | BDL | BDL | N/A | | |
| Polynuclear Aromatic Hydrocarbons: | | | | | | |
| (EPA Method 8310) | | | | | | |
| Naphthalene | 0.740 | BDL | BDL | 40 | 270 | 1.7 |
| Flourene | 0.290 | BDL | BDL | 2200 | 28000 | 160 |
| Phenanthrene | 3.9 | BDL | BDL | 2000 | 30000 | 250 |
| Flouranthrene | 9.9 | BDL | 0.052 | 2900 | 48000 | 1200 |
| Pyrene | 6.9 | BDL | 0.045 | 2200 | 37000 | 880 |
| Benzo(a)anthracene | 2.2 | BDL | 0.015 | 1.5 | 5 | 3.2 |
| Benzo(b)flouranthene | BDL | BDL | BDL | 1.4 | 4.8 | 10 |
| Benzo(a)pyrene | 1.0 | BDL | BDL | 0.1 | 0.5 | 8 |
| Benzo(g,h,i.)perylene | 0.410 | BDL | BDL | 2300 | 41000 | 32000 |
| Chrysene | 2.8 | BDL | 0.014 | 140 | 450 | 77 |
| Dibenzo(a,h)anthracene | 0.200 | BDL | BDL | 0.1 | 0.5 | 30 |
| Indeno(1,2,3-cd)pyrene | 0.560 | BDL | BDL | 1.5 | 5.3 | 28 |
| All other 8310 Compounds | BDL | BDL | BDL | N/A | | |
| FLA PRO: | BDL | BDL | BDL | 340 | 2500 | 340 |

Concentrations in mg/Kg

BDL = Below Detection Limits; N/A = Not Applicable

*Soil Cleanup Target Levels as per 62-775 F.A.C., Table II, Direct Exposure, Industrial Use Assumption/Leachability

Table 2, continued.
Summary of Laboratory Analysis
Confirmatory Soil Sampling
Mayport Naval Station Fuel Depot, Tank # 203
Mayport Naval Station, Duval County, Florida

| Parameter | Confirmatory Soil Sample ID | | | FDEP Soil Cleanup Target Levels* | | |
|---|-----------------------------|--------|------|-------------------------------------|------------|--------------|
| | CS-P7 | CS-P8 | CS-9 | Residential | Industrial | Leachability |
| | | | | | | |
| Volatile Organic Compounds: | | | | | | |
| (EPA Method 8021) | | | | | | |
| Benzene | BDL | 0.0027 | BDL | 1.1 | 0.6 | 0.007 |
| Toluene | BDL | BDL | BDL | 380 | 2600 | 0.5 |
| Ethylbenzene | BDL | BDL | BDL | 1100 | 8400 | 0.6 |
| Xylenes | BDL | BDL | BDL | 5900 | 40000 | 0.2 |
| MTBE | BDL | BDL | BDL | 3200 | 22000 | 0.5 |
| All Other 8021 Compounds | BDL | BDL | BDL | N/A | | |
| Polynuclear Aromatic Hydrocarbons: | | | | | | |
| (EPA Method 8310) | | | | | | |
| Naphthalene | BDL | BDL | BDL | 40 | 270 | 1.7 |
| Flourene | BDL | BDL | BDL | 2200 | 28000 | 160 |
| Phenanthrene | BDL | BDL | BDL | 2000 | 30000 | 250 |
| Flouranthrene | BDL | BDL | BDL | 2900 | 48000 | 1200 |
| Pyrene | 0.010 | 0.011 | BDL | 2200 | 37000 | 880 |
| Benzo(a)anthracene | 0.0053 | 0.053 | BDL | 1.5 | 5 | 3.2 |
| Benzo(b)Flouranthene | BDL | BDL | BDL | 1.4 | 4.8 | 10 |
| Benzo(a)pyrene | BDL | BDL | BDL | 0.1 | 0.5 | 8 |
| Benzo(g,h,i,)perylene | BDL | BDL | BDL | 2300 | 41000 | 32000 |
| Chrysene | BDL | BDL | BDL | 140 | 450 | 77 |
| Dibenzo(a,h)anthracene | BDL | BDL | BDL | 0.1 | 0.5 | 30 |
| Indeno(1,2,3-cd)pyrene | BDL | BDL | BDL | 1.5 | 5.3 | 28 |
| All other 8310 Compounds | BDL | BDL | BDL | N/A | | |
| FLA PRO: | BDL | BDL | BDL | 340 | 2500 | 340 |

Concentrations in mg/Kg

BDL = Below Detection Limits; N/A = Not Applicable

*Soil Cleanup Target Levels as per 62-775 F.A.C., Table II, Direct Exposure, Industrial Use Assumption/Leachability

Table 2, continued.
Summary of Laboratory Analysis
Confirmatory Soil Sampling
Mayport Naval Station Fuel Depot, Tank # 203
Mayport Naval Station, Duval County, Florida

| Parameter | Confirmatory Soil Sample ID | | | | FDEP Soil Cleanup | | |
|---|-----------------------------|-------|--------|-------|-------------------|------------|--------------|
| | CS-10 | CS-11 | CS-12 | CS-13 | Target Levels* | | |
| | | | | | Residential | Industrial | Leachability |
| Volatile Organic Compounds: | | | | | | | |
| (EPA Method 8021) | | | | | | | |
| Benzene | BDL | BDL | BDL | BDL | 1.1 | 0.6 | 0.007 |
| Toluene | BDL | 0.014 | 0.014 | 0.005 | 380 | 2600 | 0.5 |
| Ethylbenzene | BDL | BDL | BDL | BDL | 1100 | 8400 | 0.6 |
| Xylenes | BDL | 0.006 | 0.006 | 0.001 | 5900 | 40000 | 0.2 |
| MTBE | BDL | BDL | BDL | BDL | 3200 | 22000 | 0.5 |
| All Other 8021 Compounds | BDL | BDL | BDL | BDL | N/A | | |
| Polynuclear Aromatic Hydrocarbons: | | | | | | | |
| (EPA Method 8310) | | | | | | | |
| Naphthalene | BDL | BDL | BDL | BDL | 40 | 270 | 1.7 |
| Flourene | BDL | BDL | BDL | BDL | 2200 | 28000 | 160 |
| Phenanthrene | BDL | BDL | BDL | BDL | 2000 | 30000 | 250 |
| Flouranthrene | BDL | BDL | BDL | BDL | 2900 | 48000 | 1200 |
| Pyrene | BDL | BDL | BDL | BDL | 2200 | 37000 | 880 |
| Benzo(a)anthracene | BDL | BDL | BDL | BDL | 1.5 | 5 | 3.2 |
| Benzo(b)Flouranthene | BDL | BDL | BDL | BDL | 1.4 | 4.8 | 10 |
| Benzo(a)pyrene | BDL | BDL | BDL | BDL | 0.1 | 0.5 | 8 |
| Benzo(g,h,i,)perylene | BDL | BDL | BDL | BDL | 2300 | 41000 | 32000 |
| Chrysene | BDL | BDL | BDL | BDL | 140 | 450 | 77 |
| Dibenzo(a,h)anthracene | BDL | BDL | 0.013 | BDL | 0.1 | 0.5 | 30 |
| Indeno(1,2,3-cd)pyrene | BDL | BDL | 0.0085 | BDL | 1.5 | 5.3 | 28 |
| All other 8310 Compounds | BDL | BDL | BDL | BDL | N/A | | |
| FLA PRO: | BDL | BDL | BDL | BDL | 340 | 2500 | 340 |

Concentrations in mg/Kg

BDL = Below Detection Limits; N/A = Not Applicable

*Soil Cleanup Target Levels as per 62-775 F.A.C., Table II, Direct Exposure, Industrial Use Assumption/Leachability

Table 3.
Summary of Laboratory Analysis
Groundwater Sampling - Temporary Monitor Wells #TMW-1 through TMW-13
Mayport Naval Station Fuel Depot, Tank #203
Mayport Naval Station, Duval County, Florida

| Parameter | Monitor Well ID # | | | | | FDEP |
|---|-------------------|----------|----------|----------|----------|----------|
| | TMW-P1 | TMW-P2 | TMW-P3 | TMW-P4 | TMW-P5 | GWCTL* |
| Volatile Organic Compounds: | | | | | | |
| (EPA Method 601/602) | | | | | | |
| Benzene | BDL | BDL | BDL | BDL | BDL | 1µg/L |
| Toluene | BDL | BDL | BDL | BDL | BDL | 40µg/L |
| Ethylbenzene | BDL | BDL | BDL | BDL | BDL | 30µg/L |
| Xylenes | BDL | BDL | BDL | BDL | BDL | 20µg/L |
| MTBE | BDL | BDL | BDL | BDL | BDL | 50µg/L |
| Tetrachloroethene | BDL | BDL | 2.0µg/L | BDL | BDL | 3.0µg/L |
| All other 601/602 Compounds: | BDL | BDL | BDL | BDL | BDL | N/A |
| Semi-Volatile Organic Compounds: | | | | | | |
| (EPA Method 8270) | | | | | | |
| 1-Methylnaphthalene | BDL | BDL | BDL | BDL | BDL | 20µg/L |
| 2-Methylnaphthalene | BDL | BDL | BDL | BDL | BDL | 20µg/L |
| Naphthalene | BDL | BDL | BDL | BDL | BDL | 20µg/L |
| Acenaphthene | BDL | BDL | 0.62µg/L | 0.63µg/L | 1.6µg/L | 20µg/L |
| Anthracene | BDL | BDL | BDL | BDL | BDL | 2100µg/L |
| Benzo(a)anthracene | BDL | BDL | BDL | BDL | BDL | 0.2µg/L |
| Benzo(b)Flouranthene | BDL | BDL | BDL | BDL | BDL | 0.2µg/L |
| Chrysene | BDL | BDL | BDL | BDL | BDL | 4.8µg/L |
| Flourene | BDL | 0.25µg/L | 0.40µg/L | 0.16µg/L | 0.61µg/L | 280µg/L |
| Phenanthrene | BDL | 1.8µg/L | 1.4 µg/L | BDL | 3.0µg/L | 210µg/L |
| Flouranthene | BDL | 0.35µg/L | 0.75µg/L | 0.41µg/L | 1.9µg/L | 280µg/L |
| Pyrene | BDL | 0.35µg/L | 0.59µg/L | 0.45µg/L | 1.4µg/L | 210µg/L |
| All other 8310 Compounds | BDL | BDL | BDL | BDL | BDL | N/A |
| FLA PRO: | BDL | BDL | BDL | BDL | BDL | 5mg/L |
| EDB: | BDL | BDL | BDL | BDL | BDL | 0.02µg/L |
| Total Lead: | 10µg/L | 11µg/L | 8µg/L | BDL | BDL | 15µg/L |

BDL = Below Detection Limits; N/A= Not Applicable

*Groundwater Cleanup Target Levels as per 62-775 F.A.C., Table I, Groundwater Cleanup Target Levels

Table 3, Continued.
 Summary of Laboratory Analysis
 Groundwater Sampling - Temporary Monitor Wells #TMW-1 through TMW-13
 Mayport Naval Station Fuel Depot, Tank #203
 Mayport Naval Station, Duval County, Florida

| Parameter | Monitor Well ID # | | | | | FDEP |
|---|-------------------|--------|--------|-------|--------|----------------|
| | TMW-P6 | TMW-P7 | TMW-P8 | TMW-9 | TMW-10 | GWCTL* |
| Volatile Organic Compounds: | | | | | | |
| (EPA Method 601/602) | | | | | | |
| Benzene | BDL | BDL | BDL | BDL | BDL | 1 μ g/L |
| Toluene | BDL | BDL | BDL | BDL | BDL | 40 μ g/L |
| Ethylbenzene | BDL | BDL | BDL | BDL | BDL | 30 μ g/L |
| Xylenes | BDL | BDL | BDL | BDL | BDL | 20 μ g/L |
| MTBE | BDL | BDL | BDL | BDL | BDL | 50 μ g/L |
| Tetrachloroethene | BDL | BDL | BDL | BDL | BDL | 3.0 μ g/L |
| All other 601/602 Compounds: | BDL | BDL | BDL | BDL | BDL | N/A |
| Semi-Volatile Organic Compounds: | | | | | | |
| (EPA Method 8270) | | | | | | |
| 1-Methylnaphthalene | 3.1 μ g/L | BDL | BDL | BDL | BDL | 20 μ g/L |
| 2-Methylnaphthalene | BDL | BDL | BDL | BDL | BDL | 20 μ g/L |
| Naphthalene | BDL | BDL | BDL | BDL | BDL | 20 μ g/L |
| Acenaphthene | 6.9 μ g/L | BDL | BDL | BDL | BDL | 20 μ g/L |
| Anthracene | BDL | BDL | BDL | BDL | BDL | 2100 μ g/L |
| Benzo(a)anthracene | 0.16 μ g/L | BDL | BDL | BDL | BDL | 0.2 μ g/L |
| Benzo(b)Flouranthene | BDL | BDL | BDL | BDL | BDL | 0.2 μ g/L |
| Chrysene | 0.16 μ g/L | BDL | BDL | BDL | BDL | 4.8 μ g/L |
| Flourene | 1.2 μ g/L | BDL | BDL | BDL | BDL | 280 μ g/L |
| Phenanthrene | BDL | BDL | BDL | BDL | BDL | 210 μ g/L |
| Flouranthene | 1.7 μ g/L | BDL | BDL | BDL | BDL | 280 μ g/L |
| Pyrene | 1.1 μ g/L | BDL | BDL | BDL | BDL | 210 μ g/L |
| All other 8310 Compounds | BDL | BDL | BDL | BDL | BDL | N/A |
| FLA PRO: | BDL | BDL | BDL | BDL | BDL | 5mg/L |
| EDB: | BDL | BDL | BDL | BDL | BDL | 0.02 μ g/L |
| Total Lead: | BDL | BDL | BDL | BDL | BDL | 15 μ g/L |

BDL = Below Detection Limits; N/A = Not Applicable

*Groundwater Cleanup Target Levels as per 62-775 F.A.C., Table I, Groundwater Cleanup Target Levels

Table 3, Continued.
 Summary of Laboratory Analysis
 Groundwater Sampling - Temporary Monitor Wells #TMW-1 through TMW-13
 Mayport Naval Station Fuel Depot, Tank #203
 Mayport Naval Station, Duval County, Florida

| Parameter | Monitor Well ID # | | | FDEP |
|---|-------------------|--------|--------|----------------|
| | TMW-11 | TMW-12 | TMW-13 | GWCTL* |
| Volatile Organic Compounds: | | | | |
| (EPA Method 601/602) | | | | |
| Benzene | BDL | BDL | BDL | 1 μ g/L |
| Toluene | BDL | BDL | BDL | 40 μ g/L |
| Ethylbenzene | BDL | BDL | BDL | 30 μ g/L |
| Xylenes | BDL | BDL | BDL | 20 μ g/L |
| MTBE | BDL | BDL | BDL | 50 μ g/L |
| Tetrachloroethene | BDL | BDL | BDL | 3.0 μ g/L |
| All other 601/602 Compounds: | BDL | BDL | BDL | N/A |
| Semi-Volatile Organic Compounds: | | | | |
| (EPA Method 8270) | | | | |
| 1-Methylnaphthalene | BDL | BDL | BDL | 20 μ g/L |
| 2-Methylnaphthalene | BDL | BDL | BDL | 20 μ g/L |
| Naphthalene | BDL | BDL | BDL | 20 μ g/L |
| Acenaphthene | BDL | BDL | BDL | 20 μ g/L |
| Anthracene | BDL | BDL | BDL | 2100 μ g/L |
| Benzo(a)anthracene | BDL | BDL | BDL | 0.2 μ g/L |
| Benzo(b)Flouranthene | BDL | BDL | BDL | 0.2 μ g/L |
| Chrysene | BDL | BDL | BDL | 4.8 μ g/L |
| Flourene | BDL | BDL | BDL | 280 μ g/L |
| Phenanthrene | BDL | BDL | BDL | 210 μ g/L |
| Flouranthene | BDL | BDL | BDL | 280 μ g/L |
| Pyrene | BDL | BDL | BDL | 210 μ g/L |
| All other 8310 Compounds | BDL | BDL | BDL | N/A |
| FLA PRO: | BDL | BDL | BDL | 5mg/L |
| EDB: | BDL | BDL | BDL | 0.02 μ g/L |
| Total Lead: | BDL | BDL | BDL | 15 μ g/L |

BDL = Below Detection Limits; N/A = Not Applicable

*Groundwater Cleanup Target Levels as per 62-775 F.A.C., Table I, Groundwater Cleanup Target Levels



1. Photograph facing generally northwest, overlooking former location of Tank #203, with circular concrete tank pad evident.



2. Photograph facing generally northeast, overlooking former location of Tank #203, with circular concrete tank pad evident.

Photodocumntation: Limited Closure Summary, Tank #203
 Mayport Maval Station, Mayport, Florida
 Facility ID # 8626008

ATTACHMENT A

Laboratory Reports

Confirmatory Soil Analysis (CS-P1 through CS-13)

Groundwater analysis (TMW-P1 through TMW-13)

Environmental Conservation Laboratories, Inc.
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210
www.encolabs.com



DHRS Certification No. E82277

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX11524
DATE SUBMITTED: May 30, 2000
DATE REPORTED : June 12, 2000

PAGE 1 OF 27

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

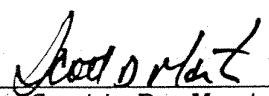
PROJECT #: 2339

Mayport Naval Station Tank #203

05/30/00

| | | | | |
|----|---|--------|---|-------|
| #1 | - | CS-P1 | @ | 11:15 |
| #2 | - | CS-P2 | @ | 12:25 |
| #3 | - | CS-P3 | @ | 13:30 |
| #4 | - | TMW-P1 | @ | 14:10 |
| #5 | - | TMW-P2 | @ | 14:55 |
| #6 | - | TMW-P3 | @ | 15:50 |

PROJECT MANAGER


Scott D. Martin

ENCO LABORATORIES

REPORT # : JAX11524

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 2 OF 27

RESULTS OF ANALYSIS

EPA METHOD 8021 -
VOLATILE ORGANICS

| | <u>CS-P1</u> | <u>Units</u> |
|-------------------------|--------------|--------------|
| Methyl tert-butyl ether | 4.0 U D1 | µg/Kg |
| Benzene | 2.1 U D1 | µg/Kg |
| Toluene | 2.1 U D1 | µg/Kg |
| Chlorobenzene | 2.1 U D1 | µg/Kg |
| Ethylbenzene | 2.1 U D1 | µg/Kg |
| m-Xylene & p-Xylene | 4.0 U D1 | µg/Kg |
| o-Xylene | 2.0 U D1 | µg/Kg |
| 1,3-Dichlorobenzene | 2.0 U D1 | µg/Kg |
| 1,4-Dichlorobenzene | 2.0 U D1 | µg/Kg |
| 1,2-Dichlorobenzene | 2.0 U D1 | µg/Kg |

Surrogate:

Bromofluorobenzene

Date Analyzed

% RECOV

101

06/01/00

LIMITS

28-165

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>CS-P1</u> | <u>Units</u> |
|-----------------------|--------------|--------------|
| Hydrocarbons (C8-C40) | 8.2 U | mg/Kg |

Surrogate:

o-Terphenyl

Date Extracted

Date Analyzed

% RECOV

82

05/31/00

06/01/00

LIMITS

51-148

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:1.72 dilution.

ENCO LABORATORIES

REPORT # : JAX11524

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 3 OF 27

RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

CS-P1

Units

| | | |
|------------------------|-------|-------|
| Naphthalene | 21 U | µg/Kg |
| Acenaphthylene | 41 U | µg/Kg |
| 1-Methylnaphthalene | 41 U | µg/Kg |
| 2-Methylnaphthalene | 41 U | µg/Kg |
| Acenaphthene | 21 U | µg/Kg |
| Fluorene | 4.1 U | µg/Kg |
| Phenanthrene | 41 U | µg/Kg |
| Anthracene | 8.2 U | µg/Kg |
| Fluoranthene | 4.1 U | µg/Kg |
| Pyrene | 4.1 U | µg/Kg |
| Benzo(a)anthracene | 12 U | µg/Kg |
| Chrysene | 4.1 U | µg/Kg |
| Benzo(b)fluoranthene | 4.1 U | µg/Kg |
| Benzo(k)fluoranthene | 4.1 U | µg/Kg |
| Benzo(a)pyrene | 4.1 U | µg/Kg |
| Dibenzo(a,h)anthracene | 4.1 U | µg/Kg |
| Benzo(g,h,i)perylene | 4.1 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 4.1 U | µg/Kg |

Surrogate:

% RECOV

LIMITS

| | | |
|----------------|----------|--------|
| p-terphenyl | 92 | 39-141 |
| Date Extracted | 06/02/00 | |
| Date Analyzed | 06/06/00 | |

MISCELLANEOUS

METHOD

CS-P1

Units

| | | | |
|----------------|---------|----------|---|
| Percent Solids | SM2540G | 80 | % |
| Date Analyzed | | 06/04/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11524

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 4 OF 27

RESULTS OF ANALYSIS

EPA METHOD 8021 -
VOLATILE ORGANICS

| | <u>CS-P2</u> | <u>Units</u> |
|-------------------------|--------------|--------------|
| Methyl tert-butyl ether | 3.0 U D1 | µg/Kg |
| Benzene | 1.8 U D1 | µg/Kg |
| Toluene | 1.8 U D1 | µg/Kg |
| Chlorobenzene | 1.8 U D1 | µg/Kg |
| Ethylbenzene | 1.8 U D1 | µg/Kg |
| m-Xylene & p-Xylene | 3.0 U D1 | µg/Kg |
| o-Xylene | 2.0 U D1 | µg/Kg |
| 1,3-Dichlorobenzene | 2.0 U D1 | µg/Kg |
| 1,4-Dichlorobenzene | 2.0 U D1 | µg/Kg |
| 1,2-Dichlorobenzene | 2.0 U D1 | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|---------------|
| Bromofluorobenzene | 85 | 28-165 |
| Date Analyzed | 06/01/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>CS-P2</u> | <u>Units</u> |
|-----------------------|--------------|--------------|
| Hydrocarbons (C8-C40) | 7.2 U | mg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------|----------------|---------------|
| o-Terphenyl | 75 | 51-148 |
| Date Extracted | 05/31/00 | |
| Date Analyzed | 06/01/00 | |

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:1.72 dilution.

ENCO LABORATORIES

REPORT # : JAX11524

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 5 OF 27

RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>CS-P2</u> | <u>Units</u> |
|----------------------------|--------------|--------------|
| Naphthalene | 18 U | µg/Kg |
| Acenaphthylene | 36 U | µg/Kg |
| 1-Methylnaphthalene | 36 U | µg/Kg |
| 2-Methylnaphthalene | 36 U | µg/Kg |
| Acenaphthene | 18 U | µg/Kg |
| Fluorene | 3.6 U | µg/Kg |
| Phenanthrene | 36 U | µg/Kg |
| Anthracene | 7.2 U | µg/Kg |
| Fluoranthene | 3.6 U | µg/Kg |
| Pyrene | 3.6 U | µg/Kg |
| Benzo (a) anthracene | 11 U | µg/Kg |
| Chrysene | 3.6 U | µg/Kg |
| Benzo (b) fluoranthene | 3.6 U | µg/Kg |
| Benzo (k) fluoranthene | 3.6 U | µg/Kg |
| Benzo (a) pyrene | 3.6 U | µg/Kg |
| Dibenzo (a, h) anthracene | 3.6 U | µg/Kg |
| Benzo (g, h, i) perylene | 3.6 U | µg/Kg |
| Indeno (1, 2, 3-cd) pyrene | 3.6 U | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------|----------------|---------------|
| p-terphenyl | 94 | 39-141 |
| Date Extracted | 06/02/00 | |
| Date Analyzed | 06/06/00 | |

MISCELLANEOUSMETHODCS-P2UnitsPercent Solids
Date Analyzed

SM2540G

92
06/04/00

%

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11524
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
 PROJECT NAME : Mayport Naval Station
 Tank #203

PAGE 6 OF 27

RESULTS OF ANALYSIS

EPA METHOD 8021 -
VOLATILE ORGANICS

| | <u>CS-P3</u> | <u>Units</u> |
|-------------------------|----------------|---------------|
| Methyl tert-butyl ether | 2.0 U D2 | µg/Kg |
| Benzene | 1.4 U D2 | µg/Kg |
| Toluene | 1.4 U D2 | µg/Kg |
| Chlorobenzene | 1.4 U D2 | µg/Kg |
| Ethylbenzene | 1.4 U D2 | µg/Kg |
| m-Xylene & p-Xylene | 2.0 U D2 | µg/Kg |
| o-Xylene | 1.0 U D2 | µg/Kg |
| 1,3-Dichlorobenzene | 1.0 U D2 | µg/Kg |
| 1,4-Dichlorobenzene | 1.0 U D2 | µg/Kg |
| 1,2-Dichlorobenzene | 1.0 U D2 | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 88 | 28-165 |
| Date Analyzed | 06/01/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>CS-P3</u> | <u>Units</u> |
|-----------------------|----------------|---------------|
| Hydrocarbons (C8-C40) | 8.4 U | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 72 | 51-148 |
| Date Extracted | 05/31/00 | |
| Date Analyzed | 06/01/00 | |

U = Compound was analyzed for but not detected to the level shown.
 D2 = Analyte value determined from a 1:1.09 dilution.

ENCO LABORATORIES

REPORT # : JAX11524

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

| | <u>CS-P3</u> | <u>Units</u> |
|------------------------|--------------|--------------|
| Naphthalene | 21 U | µg/Kg |
| Acenaphthylene | 42 U | µg/Kg |
| 1-Methylnaphthalene | 42 U | µg/Kg |
| 2-Methylnaphthalene | 42 U | µg/Kg |
| Acenaphthene | 21 U | µg/Kg |
| Fluorene | 4.2 U | µg/Kg |
| Phenanthrene | 42 U | µg/Kg |
| Anthracene | 8.4 U | µg/Kg |
| Fluoranthene | 4.2 U | µg/Kg |
| Pyrene | 4.2 U | µg/Kg |
| Benzo(a)anthracene | 12 U | µg/Kg |
| Chrysene | 4.2 U | µg/Kg |
| Benzo(b)fluoranthene | 4.2 U | µg/Kg |
| Benzo(k)fluoranthene | 4.2 U | µg/Kg |
| Benzo(a)pyrene | 4.2 U | µg/Kg |
| Dibenzo(a,h)anthracene | 4.2 U | µg/Kg |
| Benzo(g,h,i)perylene | 4.2 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 4.2 U | µg/Kg |

Surrogate:

p-terphenyl

Date Extracted

Date Analyzed

% RECOV

84

06/02/00

06/06/00

LIMITS

39-141

MISCELLANEOUSMETHODCS-P3Units

Percent Solids

SM2540G

Date Analyzed

79

06/04/00

%

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11524

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 8 OF 27

RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONSTMW-P1Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:% RECOVLIMITSBromofluorobenzene
Date Analyzed102
06/03/00

37-161

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11524
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
 PROJECT NAME : Mayport Naval Station
 Tank #203

PAGE 9 OF 27

RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>TMW-P1</u> | <u>Units</u> |
|-------------------------|---------------|--------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

Bromofluorobenzene
 Date Analyzed

% RECOV
 121
 06/03/00

LIMITS
 59-132

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11524
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
 PROJECT NAME : Mayport Naval Station
 Tank #203

PAGE 10 OF 27

RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>TMW-P1</u> | <u>Units</u> |
|------------------------|---------------|--------------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------|----------------|---------------|
| p-terphenyl | 88 | 43-148 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/08/00 | |

EPA METHOD 504 -
ETHYLENE DIBROMIDE

| | <u>TMW-P1</u> | <u>Units</u> |
|--------------------|---------------|--------------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 05/31/00 | |
| Date Analyzed | 06/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11524
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
 PROJECT NAME : Mayport Naval Station
 Tank #203

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-P1</u> | <u>Units</u> |
|---------------------|---------------|---------------|--------------|
| Lead | 200.7 | 0.010 I | mg/L |
| Date Analyzed | | 06/02/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TMW-P1</u> | <u>Units</u> |
|---|---------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| o-Terphenyl | 79 | 65-140 |
| Date Extracted | 06/02/00 | |
| Date Analyzed | 06/05/00 | |

U = Compound was analyzed for but not detected to the level shown.
 I = Analyte detected; value is between the Method Detection Level (MDL)
 and the Practical Quantitation Level (PQL).

ENCO LABORATORIES

REPORT # : JAX11524

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 12 OF 27

RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONSTMW-P2Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:% RECOVLIMITS

Bromofluorobenzene

92

37-161

Date Analyzed

06/04/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>TMW-P2</u> | <u>Units</u> |
|-------------------------|---------------|--------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|---------------|
| Bromofluorobenzene | 116 | 59-132 |
| Date Analyzed | 06/04/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

| | <u>TMW-P2</u> | <u>Units</u> |
|------------------------|---------------|--------------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.25 | µg/L |
| Phenanthrene | 1.8 | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.35 | µg/L |
| Pyrene | 0.35 | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:

p-terphenyl

Date Extracted

Date Analyzed

% RECOV

104

06/06/00

06/08/00

LIMITS

43-148

EPA METHOD 504 -

ETHYLENE DIBROMIDE

| | <u>TMW-P2</u> | <u>Units</u> |
|--------------------|---------------|--------------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 05/31/00 | |
| Date Analyzed | 06/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-P2</u> | <u>Units</u> |
|---------------------|---------------|---------------|--------------|
| Lead | 200.7 | 0.011 I | mg/L |
| Date Analyzed | | 06/02/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TMW-P2</u> | <u>Units</u> |
|---|---------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| o-Terphenyl | 66 | 65-140 |
| Date Extracted | 06/02/00 | |
| Date Analyzed | 06/05/00 | |

U = Compound was analyzed for but not detected to the level shown.
 I = Analyte detected; value is between the Method Detection Level (MDL)
 and the Practical Quantitation Level (PQL).

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

TMW-P3

Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 2.0 | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

% RECOV

LIMITS

Bromofluorobenzene

91

37-161

Date Analyzed

06/04/00

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

TMW-P3

Units

Methyl tert-butyl ether
Benzene
Toluene
Chlorobenzene
Ethylbenzene
m-Xylene & p-Xylene
o-Xylene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene

2.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U

µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L

Surrogate:

Bromofluorobenzene
Date Analyzed

% RECOV

116
06/04/00

LIMITS
59-132

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

| | TMW-P3 | Units |
|------------------------|----------------|---------------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.62 | µg/L |
| Fluorene | 0.40 | µg/L |
| Phenanthrene | 1.4 | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.75 | µg/L |
| Pyrene | 0.59 | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-terphenyl | 103 | 43-148 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/08/00 | |

EPA METHOD 504 -

ETHYLENE DIBROMIDE

| | TMW-P3 | Units |
|--------------------|----------|-------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 05/31/00 | |
| Date Analyzed | 06/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-P3</u> | <u>Units</u> |
|---------------------|---------------|---------------|--------------|
| Lead | 200.7 | 0.0080 I | mg/L |
| Date Analyzed | | 06/02/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>TMW-P3</u> | <u>Units</u> |
|-----------------------|----------------|---------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 65 | 65-140 |
| Date Extracted | 06/02/00 | |
| Date Analyzed | 06/05/00 | |

U = Compound was analyzed for but not detected to the level shown.
 I = Analyte detected; value is between the Method Detection Level (MDL)
 and the Practical Quantitation Level (PQL).

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

| | <u>LAB BLANK</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------------|------------------|------------------|---------------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 2.0 U | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 2.0 U | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 100 | 95 | 37-161 |
| Date Analyzed | 06/03/00 | 06/04/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>LAB BLANK</u> | <u>Units</u> |
|-------------------------|------------------|---------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 131 | 59-132 |
| Date Analyzed | 06/03/00 | |

EPA METHOD 8021 -
VOLATILE ORGANICS

| | <u>LAB BLANK</u> | <u>Units</u> |
|-------------------------|------------------|---------------|
| Methyl tert-butyl ether | 2.0 U | µg/Kg |
| Benzene | 1.0 U | µg/Kg |
| Toluene | 1.0 U | µg/Kg |
| Chlorobenzene | 1.0 U | µg/Kg |
| Ethylbenzene | 1.0 U | µg/Kg |
| m-Xylene & p-Xylene | 2.0 U | µg/Kg |
| o-Xylene | 1.0 U | µg/Kg |
| 1,3-Dichlorobenzene | 1.0 U | µg/Kg |
| 1,4-Dichlorobenzene | 1.0 U | µg/Kg |
| 1,2-Dichlorobenzene | 1.0 U | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 94 | 28-165 |
| Date Analyzed | 06/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
 PAH BY HPLC

LAB BLANK

Units

| | | |
|------------------------|--------|------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:

% RECOV

LIMITS

| | | |
|----------------|----------|--------|
| p-terphenyl | 104 | 43-148 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

| | <u>LAB BLANK</u> | <u>Units</u> |
|------------------------|------------------|--------------|
| Naphthalene | 16 U | µg/Kg |
| Acenaphthylene | 33 U | µg/Kg |
| 1-Methylnaphthalene | 33 U | µg/Kg |
| 2-Methylnaphthalene | 33 U | µg/Kg |
| Acenaphthene | 16 U | µg/Kg |
| Fluorene | 3.3 U | µg/Kg |
| Phenanthrene | 33 U | µg/Kg |
| Anthracene | 6.6 U | µg/Kg |
| Fluoranthene | 3.3 U | µg/Kg |
| Pyrene | 3.3 U | µg/Kg |
| Benzo(a)anthracene | 9.9 U | µg/Kg |
| Chrysene | 3.3 U | µg/Kg |
| Benzo(b)fluoranthene | 3.3 U | µg/Kg |
| Benzo(k)fluoranthene | 3.3 U | µg/Kg |
| Benzo(a)pyrene | 3.3 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.3 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.3 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.3 U | µg/Kg |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------|----------------|---------------|
| p-terphenyl | 101 | 39-141 |
| Date Extracted | 06/02/00 | |
| Date Analyzed | 06/05/00 | |

EPA METHOD 504 -

ETHYLENE DIBROMIDE

| | <u>LAB BLANK</u> | <u>Units</u> |
|--------------------|------------------|--------------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 05/31/00 | |
| Date Analyzed | 06/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------|---------------|------------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 06/01/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---|------------------|---------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 87 | 65-140 |
| Date Extracted | 06/02/00 | |
| Date Analyzed | 06/05/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---|------------------|---------------|
| Hydrocarbons (C8-C40) | 6.6 U | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 84 | 51-148 |
| Date Extracted | 05/31/00 | |
| Date Analyzed | 06/01/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>LAB BLANK</u> | <u>Units</u> |
|-------------------------|------------------|--------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|---------------|
| Bromofluorobenzene | 129 | 59-132 |
| Date Analyzed | 06/04/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 601</u> | | | | |
| Methylene Chloride | 120/ 89/102 | 51-155 | 30 | 29 |
| Chloroform | 129/ 97/107 | 63-145 | 28 | 16 |
| Carbon Tetrachloride | 137/ 89/116 | 64-146 | 42 | 21 |
| Trichloroethene | 125/ 86/ 98 | 60-140 | 37 | 24 |
| Tetrachloroethene | 115/ 88/109 | 66-146 | 27 | 21 |
| Chlorobenzene | 121/101/113 | 70-137 | 18 | 19 |
| <u>EPA Method 602</u> | | | | |
| Benzene | 116/ 91/ 97 | 60-138 | 24 | 17 |
| Toluene | 121/112/128 | 57-138 | 8 | 16 |
| Ethylbenzene | 125/116/128 | 49-144 | 7 | 17 |
| o-Xylene | 122/112/121 | 50-151 | 8 | 17 |
| <u>EPA Method 8021</u> | | | | |
| Benzene | 80/ 76/ 79 | 59-144 | 5 | 25 |
| Toluene | 82/ 73/ 77 | 67-132 | 12 | 58 |
| Ethylbenzene | 72/ 71/ 74 | 60-169 | 1 | 28 |
| o-Xylene | 82/ 77/ 81 | 62-183 | 6 | 24 |
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 81/ 77/ 69 | 59-111 | 5 | 12 |
| Acenaphthene | 98/ 93/ 78 | 58-128 | 5 | 13 |
| Benzo(a)pyrene | 111/101/ 90 | 78-134 | 9 | 15 |
| Benzo(g,h,i)perylene | 100/ 91/ 84 | 62-115 | 9 | 30 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

ENCO LABORATORIES

REPORT # : JAX11524

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 27 OF 27

QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY MS/MSD/LCS</u> | <u>ACCEPT LIMITS</u> | <u>% RPD MS/MSD</u> | <u>ACCEPT LIMITS</u> |
|------------------------------|----------------------------------|--------------------------|-------------------------|--------------------------|
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 84/ 82/ 84 | 48-130 | 2 | 20 |
| Acenaphthene | 98/ 98/ 97 | 36-127 | <1 | 17 |
| Benzo(a)pyrene | 94/106/ 79 | 64-141 | 12 | 22 |
| Benzo(g,h,i)perylene | 99/ 98/112 | 58-168 | 1 | 21 |
| <u>EPA Method 504</u> | | | | |
| Ethylene Dibromide | 86/ 91/ 84 | 58-135 | 6 | 22 |
| <u>TOTAL METALS</u> | | | | |
| Lead, 200.7 | 96/ 98/102 | 68-126 | 2 | 19 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 79/ 85/ 83 | 51-163 | 7 | 27 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 88/ 89/ 81 | 62-204 | 1 | 25 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

Christine T. Resto

From: Christine T. Resto <crest@encolabs.com>
To: Matthew Foti, Ph.D. <mfoti@encolabs.com>
Sent: Friday, June 09, 2000 3:27 PM
Subject: 8021/arom for ELLIS (Bayard Water Line)

We are sending the five soil samples to ORL tonight--they break hold tomorrow afternoon. Per our conversation, the client wants results by EOB on Thursday. Thanks for your help. Have fun tonight.

6/13/00



ENVIRONMENTAL CONSERVATION LABORATORIES

QSARF # _____

4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
Ph. (904) 296-3007 • Fax (904) 296-6210

10207 General Drive
Orlando, Florida 32824-8529
Ph. (407) 826-5314 • Fax (407) 850-6945

1015 Passport Way
Cary, North Carolina 27513
Ph. (919) 677-1669 • Fax (919) 677-9846

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

| PROJECT NO. #2339 | | PROJECT LOC. Jacksonville, FL | | PROJECT NAME | | PROJECT NO. #2339 | | PROJECT LOC. Jacksonville, FL | | PROJECT NAME | |
|---|---------|-------------------------------|------|--------------|-----------------------|-------------------|--|-------------------------------|--|--------------|--|
| PROJECT NO. #2339 | | PROJECT LOC. Jacksonville, FL | | PROJECT NAME | | PROJECT NO. #2339 | | PROJECT LOC. Jacksonville, FL | | PROJECT NAME | |
| PROJECT NO. #2339 | | PROJECT LOC. Jacksonville, FL | | PROJECT NAME | | PROJECT NO. #2339 | | PROJECT LOC. Jacksonville, FL | | PROJECT NAME | |
| CLIENT NAME: Environmental Recovery, Inc. / Mr. Chuck Nevil | | | | | | | | | | | |
| CLIENT ADDRESS (CITY, STATE, ZIP): 251 Levy Road, Atlantic Beach, FL 32233 | | | | | | | | | | | |
| SAMPLE IDENTIFICATION | | | | | | | | | | | |
| STATION | DATE | TIME | GRAB | COMP | SAMPLE IDENTIFICATION | | | | | | |
| #1 | 5/30/00 | 11:15 | X | | CS-P1 | | | | | | |
| #2 | 5/30/00 | 12:25 | X | | CS-P2 | | | | | | |
| #3 | 5/30/00 | 13:30 | X | | CS-P3 | | | | | | |
| SURFACE WATER | | | | | | | | | | | |
| GROUND WATER | | | | | | | | | | | |
| WASTEWATER | | | | | | | | | | | |
| DRINKING WATER | | | | | | | | | | | |
| SOIL/SOLID/SEDIMENT | | | | | | | | | | | |
| NONAQUEOUS LIQUID (OIL, SOLVENT, ETC.) | | | | | | | | | | | |
| AIR | | | | | | | | | | | |
| SLUDGE | | | | | | | | | | | |
| OTHER | | | | | | | | | | | |
| REMARKS | | | | | | | | | | | |
| Simple kits consist of: Soil: 3x5g in Envelope 1x 4oz Glass jar 6W: 2x 40ml vials HCC Kits 2x 40ml vials in (Eos) 1x 1000ml glass jar (HCC) 2x 1000ml glass jar (HCC) 1x 500ml Poly HDPE (HCC) Simple containers sealed in poly bags and placed on wet ice for transport Samples and delivered to ENCO by EN 05/30/00 0330 Custody Seal intact RELINQUISHED BY: (SIGNATURE) DATE TIME RECEIVED BY: (SIGNATURE) DATE TIME | | | | | | | | | | | |

Environmental Conservation Laboratories, Inc.
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210
www.encolabs.com



DHRS Certification No. E82277

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX11568
DATE SUBMITTED: May 31, 2000
DATE REPORTED : June 12, 2000

PAGE 1 Of 42

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

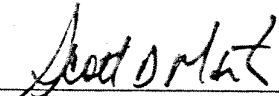
PROJECT #: 2339

Mayport Naval Station Tank #203

05/31/00

| | | | | |
|-----|---|--------|---|-------|
| #1 | - | CS-P4 | @ | 09:30 |
| #2 | - | CS-P5 | @ | 10:05 |
| #3 | - | CS-P6 | @ | 10:40 |
| #4 | - | CS-P7 | @ | 11:10 |
| #5 | - | CS-P8 | @ | 11:40 |
| #6 | - | TMW-P4 | @ | 14:40 |
| #7 | - | TMW-P5 | @ | 15:20 |
| #8 | - | TMW-P6 | @ | 16:00 |
| #9 | - | TMW-P7 | @ | 16:40 |
| #10 | - | TMW-P8 | @ | 17:15 |

PROJECT MANAGER


Scott D. Martin

ENCO LABORATORIES

REPORT # : JAX11568
DATE REPORTED: June 12, 2000
REFERENCE : 2339
PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 2 Of 42

RESULTS OF ANALYSIS

EPA METHOD 8021 -
VOLATILE ORGANICSCS-P4Units

| | | |
|-------------------------|----------|-------|
| Methyl tert-butyl ether | 5.0 U D1 | µg/Kg |
| Benzene | 2.2 U D1 | µg/Kg |
| Toluene | 2.2 U D1 | µg/Kg |
| Chlorobenzene | 2.2 U D1 | µg/Kg |
| Ethylbenzene | 2.2 U D1 | µg/Kg |
| m-Xylene & p-Xylene | 5.0 U D1 | µg/Kg |
| o-Xylene | 2.0 U D1 | µg/Kg |
| 1,3-Dichlorobenzene | 2.0 U D1 | µg/Kg |
| 1,4-Dichlorobenzene | 2.0 U D1 | µg/Kg |
| 1,2-Dichlorobenzene | 2.0 U D1 | µg/Kg |

Surrogate:% RECOVLIMITS

| | | |
|--------------------|----------|--------|
| Bromofluorobenzene | 101 | 28-165 |
| Date Analyzed | 06/06/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.CS-P4Units

| | | |
|-----------------------|-------|-------|
| Hydrocarbons (C8-C40) | 7.7 U | mg/Kg |
|-----------------------|-------|-------|

Surrogate:% RECOVLIMITS

| | | |
|----------------|----------|--------|
| o-Terphenyl | 90 | 51-148 |
| Date Extracted | 06/07/00 | |
| Date Analyzed | 06/08/00 | |

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:1.89 dilution.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 3 Of 42

RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | CS-P4 | Units |
|------------------------|----------|-------|
| Naphthalene | 740 D2 | µg/Kg |
| Acenaphthylene | 380 U D2 | µg/Kg |
| 1-Methylnaphthalene | 380 U D2 | µg/Kg |
| 2-Methylnaphthalene | 380 U D2 | µg/Kg |
| Acenaphthene | 190 U D2 | µg/Kg |
| Fluorene | 290 D2 | µg/Kg |
| Phenanthrene | 3900 D2 | µg/Kg |
| Anthracene | 77 U D2 | µg/Kg |
| Fluoranthene | 9900 D2 | µg/Kg |
| Pyrene | 6900 D2 | µg/Kg |
| Benzo(a)anthracene | 2200 D2 | µg/Kg |
| Chrysene | 2800 D2 | µg/Kg |
| Benzo(b)fluoranthene | .38 U D2 | µg/Kg |
| Benzo(k)fluoranthene | 38 U D2 | µg/Kg |
| Benzo(a)pyrene | 1000 D2 | µg/Kg |
| Dibenzo(a,h)anthracene | 200 D2 | µg/Kg |
| Benzo(g,h,i)perylene | 410 D2 | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 560 D2 | µg/Kg |

Surrogate:

% RECOV

LIMITS

| | |
|----------------|----------|
| p-terphenyl | 74 |
| Date Extracted | 06/02/00 |
| Date Analyzed | 06/06/00 |

39-141

MISCELLANEOUS

METHOD

CS-P4

Units

| | | | |
|----------------|---------|----------|---|
| Percent Solids | SM2540G | 86 | % |
| Date Analyzed | | 06/04/00 | |

U = Compound was analyzed for but not detected to the level shown.
D2 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 4 Of 42

RESULTS OF ANALYSIS

EPA METHOD 8021 -
VOLATILE ORGANICS

| | <u>CS-P5</u> | <u>Units</u> |
|-------------------------|--------------|--------------|
| Methyl tert-butyl ether | 5.0 U D3 | µg/Kg |
| Benzene | 2.3 U D3 | µg/Kg |
| Toluene | 2.3 U D3 | µg/Kg |
| Chlorobenzene | 2.3 U D3 | µg/Kg |
| Ethylbenzene | 2.3 U D3 | µg/Kg |
| m-Xylene & p-Xylene | 5.0 U D3 | µg/Kg |
| o-Xylene | 2.0 U D3 | µg/Kg |
| 1,3-Dichlorobenzene | 2.0 U D3 | µg/Kg |
| 1,4-Dichlorobenzene | 2.0 U D3 | µg/Kg |
| 1,2-Dichlorobenzene | 2.0 U D3 | µg/Kg |

Surrogate:

Bromofluorobenzene

Date Analyzed

| <u>% RECOV</u> |
|----------------|
| 50 |
| 06/04/00 |

| <u>LIMITS</u> |
|---------------|
| 28-165 |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>CS-P5</u> | <u>Units</u> |
|-----------------------|--------------|--------------|
| Hydrocarbons (C8-C40) | 11 U | mg/Kg |

Surrogate:

o-Terphenyl

Date Extracted

Date Analyzed

| <u>% RECOV</u> |
|----------------|
| 75 |
| 06/07/00 |
| 06/08/00 |

| <u>LIMITS</u> |
|---------------|
| 51-148 |

U = Compound was analyzed for but not detected to the level shown.
D3 = Analyte value determined from a 1:1.35 dilution.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 5 Of 42

RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

CS-P5

Units

| | | |
|------------------------|-------|-------|
| Naphthalene | 27 U | µg/Kg |
| Acenaphthylene | 54 U | µg/Kg |
| 1-Methylnaphthalene | 54 U | µg/Kg |
| 2-Methylnaphthalene | 54 U | µg/Kg |
| Acenaphthene | 27 U | µg/Kg |
| Fluorene | 5.4 U | µg/Kg |
| Phenanthrene | 54 U | µg/Kg |
| Anthracene | 11 U | µg/Kg |
| Fluoranthene | 5.4 U | µg/Kg |
| Pyrene | 5.4 U | µg/Kg |
| Benzo(a)anthracene | 16 U | µg/Kg |
| Chrysene | 5.4 U | µg/Kg |
| Benzo(b)fluoranthene | 5.4 U | µg/Kg |
| Benzo(k)fluoranthene | 5.4 U | µg/Kg |
| Benzo(a)pyrene | 5.4 U | µg/Kg |
| Dibenzo(a,h)anthracene | 5.4 U | µg/Kg |
| Benzo(g,h,i)perylene | 5.4 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 5.4 U | µg/Kg |

Surrogate:

% RECOV

LIMITS

| | | |
|----------------|----------|--------|
| p-terphenyl | 81 | 39-141 |
| Date Extracted | 06/02/00 | |
| Date Analyzed | 06/06/00 | |

MISCELLANEOUS

METHOD

CS-P5

Units

| | | | |
|----------------|---------|----------|---|
| Percent Solids | SM2540G | 61 | % |
| Date Analyzed | | 06/04/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 6 Of 42

RESULTS OF ANALYSIS

EPA METHOD 8021 -
VOLATILE ORGANICSCS-P6UnitsMethyl tert-butyl ether
Benzene
Toluene
Chlorobenzene
Ethylbenzene
m-Xylene & p-Xylene
o-Xylene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene4.0 U D4
1.8 U D4
1.8 U D4
1.8 U D4
1.8 U D4
4.0 U D4
2.0 U D4
2.0 U D4
2.0 U D4
2.0 U D4 $\mu\text{g/Kg}$
 $\mu\text{g/Kg}$
 $\mu\text{g/Kg}$
 $\mu\text{g/Kg}$
 $\mu\text{g/Kg}$
 $\mu\text{g/Kg}$
 $\mu\text{g/Kg}$
 $\mu\text{g/Kg}$
 $\mu\text{g/Kg}$
 $\mu\text{g/Kg}$ Surrogate:% RECOVLIMITSBromofluorobenzene
Date Analyzed66
06/04/00

28-165

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.CS-P6Units

Hydrocarbons (C8-C40)

8.1 U

mg/Kg

Surrogate:% RECOVLIMITSo-Terphenyl
Date Extracted
Date Analyzed79
06/07/00
06/08/00

51-148

U = Compound was analyzed for but not detected to the level shown.
D4 = Analyte value determined from a 1:1.52 dilution.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLCCS-P6Units

| | | |
|------------------------|-------|-------|
| Naphthalene | 20 U | µg/Kg |
| Acenaphthylene | 41 U | µg/Kg |
| 1-Methylnaphthalene | 41 U | µg/Kg |
| 2-Methylnaphthalene | 41 U | µg/Kg |
| Acenaphthene | 20 U | µg/Kg |
| Fluorene | 4.1 U | µg/Kg |
| Phenanthrene | 41 U | µg/Kg |
| Anthracene | 8.1 U | µg/Kg |
| Fluoranthene | 52 | µg/Kg |
| Pyrene | 45 | µg/Kg |
| Benzo(a)anthracene | 15 | µg/Kg |
| Chrysene | 14 | µg/Kg |
| Benzo(b)fluoranthene | 4.1 U | µg/Kg |
| Benzo(k)fluoranthene | 4.1 U | µg/Kg |
| Benzo(a)pyrene | 4.1 U | µg/Kg |
| Dibenzo(a,h)anthracene | 4.1 U | µg/Kg |
| Benzo(g,h,i)perylene | 4.1 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 4.1 U | µg/Kg |

Surrogate:% RECOVLIMITS

| | | |
|----------------|----------|--------|
| p-terphenyl | 90 | 39-141 |
| Date Extracted | 06/02/00 | |
| Date Analyzed | 06/06/00 | |

MISCELLANEOUSMETHODCS-P6Units

| | | | |
|----------------|---------|----------|---|
| Percent Solids | SM2540G | 81 | % |
| Date Analyzed | | 06/04/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
 PROJECT NAME : Mayport Naval Station
 Tank #203

PAGE 8 Of 42

RESULTS OF ANALYSIS

EPA METHOD 8021 -
VOLATILE ORGANICS

CS-P7 Units

| | | |
|-------------------------|----------|-------|
| Methyl tert-butyl ether | 6.0 U D5 | µg/Kg |
| Benzene | 3.0 U D5 | µg/Kg |
| Toluene | 3.0 I D5 | µg/Kg |
| Chlorobenzene | 3.0 U D5 | µg/Kg |
| Ethylbenzene | 3.0 U D5 | µg/Kg |
| m-Xylene & p-Xylene | 6.0 U D5 | µg/Kg |
| o-Xylene | 3.0 U D5 | µg/Kg |
| 1,3-Dichlorobenzene | 3.0 U D5 | µg/Kg |
| 1,4-Dichlorobenzene | 3.0 U D5 | µg/Kg |
| 1,2-Dichlorobenzene | 3.0 U D5 | µg/Kg |

Surrogate:

% RECOV

LIMITS

| | | |
|--------------------|----------|--------|
| Bromofluorobenzene | 53 | 28-165 |
| Date Analyzed | 06/04/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

CS-P7 Units

| | | |
|-----------------------|-------|-------|
| Hydrocarbons (C8-C40) | 7.1 U | mg/Kg |
|-----------------------|-------|-------|

Surrogate:

% RECOV

LIMITS

| | | |
|----------------|----------|--------|
| o-Terphenyl | 85 | 51-148 |
| Date Extracted | 06/07/00 | |
| Date Analyzed | 06/08/00 | |

U = Compound was analyzed for but not detected to the level shown.
 I = Analyte detected; value is between the Method Detection Level (MDL)
 and the Practical Quantitation Level (PQL).
 D5 = Analyte value determined from a 1:2.78 dilution.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLCCS-P7Units

| | | |
|------------------------|-------|-------|
| Naphthalene | 18 U | µg/Kg |
| Acenaphthylene | 35 U | µg/Kg |
| 1-Methylnaphthalene | 35 U | µg/Kg |
| 2-Methylnaphthalene | 35 U | µg/Kg |
| Acenaphthene | 18 U | µg/Kg |
| Fluorene | 3.5 U | µg/Kg |
| Phenanthrene | 35 U | µg/Kg |
| Anthracene | 7.1 U | µg/Kg |
| Fluoranthene | 10 | µg/Kg |
| Pyrene | 5.3 | µg/Kg |
| Benzo(a)anthracene | 11 U | µg/Kg |
| Chrysene | 3.5 U | µg/Kg |
| Benzo(b)fluoranthene | 3.5 U | µg/Kg |
| Benzo(k)fluoranthene | 3.5 U | µg/Kg |
| Benzo(a)pyrene | 3.5 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.5 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.5 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.5 U | µg/Kg |

Surrogate:% RECOVLIMITS

p-terphenyl

94

39-141

Date Extracted

06/02/00

Date Analyzed

06/06/00

MISCELLANEOUSMETHODCS-P7Units

Percent Solids

SM2540G

93

%

Date Analyzed

06/04/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 10 Of 42

RESULTS OF ANALYSIS

EPA METHOD 8021 -
VOLATILE ORGANICS

| | <u>CS-P8</u> | <u>Units</u> |
|-------------------------|--------------|--------------|
| Methyl tert-butyl ether | 4.0 U D6 | µg/Kg |
| Benzene | 2.7 I D6 | µg/Kg |
| Toluene | 2.2 U D6 | µg/Kg |
| Chlorobenzene | 2.2 U D6 | µg/Kg |
| Ethylbenzene | 2.2 U D6 | µg/Kg |
| m-Xylene & p-Xylene | 4.0 U D6 | µg/Kg |
| o-Xylene | 2.0 U D6 | µg/Kg |
| 1,3-Dichlorobenzene | 2.0 U D6 | µg/Kg |
| 1,4-Dichlorobenzene | 2.0 U D6 | µg/Kg |
| 1,2-Dichlorobenzene | 2.0 U D6 | µg/Kg |

Surrogate:% RECOVLIMITS

Bromofluorobenzene

63

28-165

Date Analyzed

06/04/00

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>CS-P8</u> | <u>Units</u> |
|-----------------------|--------------|--------------|
| Hydrocarbons (C8-C40) | 7.1 U | mg/Kg |

Surrogate:% RECOVLIMITS

o-Terphenyl

88

51-148

Date Extracted

06/07/00

Date Analyzed

06/08/00

U = Compound was analyzed for but not detected to the level shown.

I = Analyte detected; value is between the Method Detection Level (MDL)
and the Practical Quantitation Level (PQL).

D6 = Analyte value determined from a 1:2.08 dilution.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 11 Of 42

RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLCCS-P8Units

| | | |
|------------------------|-------|-------|
| Naphthalene | 18 U | µg/Kg |
| Acenaphthylene | 35 U | µg/Kg |
| 1-Methylnaphthalene | 35 U | µg/Kg |
| 2-Methylnaphthalene | 35 U | µg/Kg |
| Acenaphthene | 18 U | µg/Kg |
| Fluorene | 3.5 U | µg/Kg |
| Phenanthrene | 35 U | µg/Kg |
| Anthracene | 7.1 U | µg/Kg |
| Fluoranthene | 11 | µg/Kg |
| Pyrene | 5.3 | µg/Kg |
| Benzo(a)anthracene | 11 U | µg/Kg |
| Chrysene | 3.5 U | µg/Kg |
| Benzo(b)fluoranthene | 3.5 U | µg/Kg |
| Benzo(k)fluoranthene | 3.5 U | µg/Kg |
| Benzo(a)pyrene | 3.5 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.5 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.5 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.5 U | µg/Kg |

Surrogate:% RECOVLIMITS

| | | |
|----------------|----------|--------|
| p-terphenyl | 98 | 39-141 |
| Date Extracted | 06/02/00 | |
| Date Analyzed | 06/06/00 | |

MISCELLANEOUSMETHODCS-P8Units

| | | | |
|----------------|---------|----------|---|
| Percent Solids | SM2540G | 93 | % |
| Date Analyzed | | 06/04/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

TMW-P4

Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

% RECOV

LIMITS

Bromofluorobenzene
Date Analyzed

90
06/04/00

37-161

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
 PROJECT NAME : Mayport Naval Station
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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

TMW-P4

Units

Methyl tert-butyl ether
 Benzene
 Toluene
 Chlorobenzene
 Ethylbenzene
 m-Xylene & p-Xylene
 o-Xylene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 1,2-Dichlorobenzene

2.0 U
 1.0 U
 1.0 U
 1.0 U
 1.0 U
 1.0 U
 1.0 U
 1.0 U
 1.0 U

µg/L
 µg/L
 µg/L
 µg/L
 µg/L
 µg/L
 µg/L
 µg/L
 µg/L

Surrogate:

% RECOV

LIMITS

Bromofluorobenzene
 Date Analyzed

106
 06/04/00

59-132

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLCTMW-P4Units

| | | |
|------------------------|--------|------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.63 | µg/L |
| Fluorene | 0.16 | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.41 | µg/L |
| Pyrene | 0.45 | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:% RECOVLIMITS

p-terphenyl

109

43-148

Date Extracted

06/06/00

Date Analyzed

06/08/00

EPA METHOD 504 -

ETHYLENE DIBROMIDETMW-P4Units

Ethylene Dibromide

0.020 U

µg/L

Date Extracted

06/06/00

Date Analyzed

06/06/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568
 DATE REPORTED: June 12, 2000
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 PROJECT NAME : Mayport Naval Station
 Tank #203

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-P4</u> | <u>Units</u> |
|---------------------|---------------|---------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 06/05/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TMW-P4</u> | <u>Units</u> |
|---|---------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| o-Terphenyl | 75 | 65-140 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

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PROJECT NAME : Mayport Naval Station
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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONSTMW-P5Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:% RECOVLIMITS

Bromofluorobenzene

101

37-161

Date Analyzed

06/03/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

TMW-P5

Units

Methyl tert-butyl ether
 Benzene
 Toluene
 Chlorobenzene
 Ethylbenzene
 m-Xylene & p-Xylene
 o-Xylene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 1,2-Dichlorobenzene

2.0 U
 1.0 U
 1.0 U
 1.0 U
 1.0 U
 1.0 U
 1.0 U
 1.0 U
 1.0 U

µg/L
 µg/L
 µg/L
 µg/L
 µg/L
 µg/L
 µg/L
 µg/L
 µg/L

Surrogate:

% RECOV

LIMITS

Bromofluorobenzene
 Date Analyzed

118
 06/03/00

59-132

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

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PROJECT NAME : Mayport Naval Station
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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>TMW-P5</u> | <u>Units</u> |
|------------------------|---------------|--------------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 1.6 | µg/L |
| Fluorene | 0.61 | µg/L |
| Phenanthrene | 3.0 | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 1.9 | µg/L |
| Pyrene | 1.4 | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:% RECOVLIMITS

p-terphenyl

103

43-148

Date Extracted

06/06/00

Date Analyzed

06/08/00

EPA METHOD 504 -ETHYLENE DIBROMIDETMW-P5Units

Ethylene Dibromide

0.020 U

µg/L

Date Extracted

06/06/00

Date Analyzed

06/06/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568
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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-P5</u> | <u>Units</u> |
|---------------------|---------------|---------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 06/05/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TMW-P5</u> | <u>Units</u> |
|---|---------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| o-Terphenyl | 80 | 65-140 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

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PROJECT NAME : Mayport Naval Station
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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONSTMW-P6Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:% RECOVLIMITSBromofluorobenzene
Date Analyzed103
06/03/00

37-161

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568
 DATE REPORTED: June 12, 2000
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 PROJECT NAME : Mayport Naval Station
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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>TMW-P6</u> | <u>Units</u> |
|-------------------------|---------------|--------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|---------------|
| Bromofluorobenzene | 118 | 59-132 |
| Date Analyzed | 06/03/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>TMW-P6</u> | <u>Units</u> |
|------------------------|---------------|--------------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 3.1 | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 6.9 | µg/L |
| Fluorene | 1.2 | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 1.7 | µg/L |
| Pyrene | 1.1 | µg/L |
| Benzo(a)anthracene | 0.16 | µg/L |
| Chrysene | 0.16 | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|----------------|----------------|---------------|
| p-terphenyl | 94 | 43-148 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/08/00 | |

EPA METHOD 504 -
ETHYLENE DIBROMIDE

| | <u>TMW-P6</u> | <u>Units</u> |
|--------------------|---------------|--------------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568
 DATE REPORTED: June 12, 2000
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 PROJECT NAME : Mayport Naval Station
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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-P6</u> | <u>Units</u> |
|---------------------|---------------|---------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 06/05/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TMW-P6</u> | <u>Units</u> |
|---|---------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| O-Terphenyl | 89 | 65-140 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONSTMW-P7Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:% RECOVLIMITSBromofluorobenzene
Date Analyzed100
06/03/00

37-161

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICSTMW-P7Units

Methyl tert-butyl ether
Benzene
Toluene
Chlorobenzene
Ethylbenzene
m-Xylene & p-Xylene
o-Xylene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene

2.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U

µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L

Surrogate:% RECOVLIMITS

Bromofluorobenzene
Date Analyzed

117
06/03/00

59-132

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>TMW-P7</u> | <u>Units</u> |
|------------------------|----------------|---------------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-terphenyl | 105 | 43-148 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/08/00 | |

EPA METHOD 504 -
ETHYLENE DIBROMIDE

| | <u>TMW-P7</u> | <u>Units</u> |
|--------------------|---------------|--------------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568
 DATE REPORTED: June 12, 2000
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 Tank #203

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-P7</u> | <u>Units</u> |
|---------------------|---------------|---------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 06/05/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TMW-P7</u> | <u>Units</u> |
|---|---------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| o-Terphenyl | 83 | 65-140 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONSTMW-P8Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:% RECOVLIMITSBromofluorobenzene
Date Analyzed92
06/06/00

37-161

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
 PROJECT NAME : Mayport Naval Station
 Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>TMW-P8</u> | <u>Units</u> |
|-------------------------|---------------|--------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|---------------|
| Bromofluorobenzene | 107 | 59-132 |
| Date Analyzed | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>TMW-P8</u> | <u>Units</u> |
|------------------------|---------------|--------------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:% RECOVLIMITS

| | | |
|----------------|----------|--------|
| p-terphenyl | 98 | 43-148 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/08/00 | |

EPA METHOD 504 -
ETHYLENE DIBROMIDETMW-P8Units

| | | |
|--------------------|----------|------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
 PROJECT NAME : Mayport Naval Station
 Tank #203

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-P8</u> | <u>Units</u> |
|---------------------|---------------|---------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 06/05/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TMW-P8</u> | <u>Units</u> |
|---|---------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| o-Terphenyl | 74 | 65-140 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONSLAB BLANKUnits

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:% RECOVLIMITS

Bromofluorobenzene

100

37-161

Date Analyzed

06/03/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICSLAB BLANKUnits

| | | |
|-------------------------|-------|------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:% RECOVLIMITS

Bromofluorobenzene

131

59-132

Date Analyzed

06/03/00

EPA METHOD 8021 -
VOLATILE ORGANICSLAB BLANKUnits

| | | |
|-------------------------|-------|-------|
| Methyl tert-butyl ether | 2.0 U | µg/Kg |
| Benzene | 1.0 U | µg/Kg |
| Toluene | 1.0 U | µg/Kg |
| Chlorobenzene | 1.0 U | µg/Kg |
| Ethylbenzene | 1.0 U | µg/Kg |
| m-Xylene & p-Xylene | 2.0 U | µg/Kg |
| o-Xylene | 1.0 U | µg/Kg |
| 1,3-Dichlorobenzene | 1.0 U | µg/Kg |
| 1,4-Dichlorobenzene | 1.0 U | µg/Kg |
| 1,2-Dichlorobenzene | 1.0 U | µg/Kg |

Surrogate:% RECOVLIMITS

Bromofluorobenzene

89

28-165

Date Analyzed

06/04/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

LAB BLANK

Units

| | | |
|------------------------|--------|------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:% RECOVLIMITS

p-terphenyl

104

43-148

Date Extracted

06/06/00

Date Analyzed

06/07/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

LAB BLANK

Units

| | | |
|------------------------|-------|-------|
| Naphthalene | 16 U | µg/Kg |
| Acenaphthylene | 33 U | µg/Kg |
| 1-Methylnaphthalene | 33 U | µg/Kg |
| 2-Methylnaphthalene | 33 U | µg/Kg |
| Acenaphthene | 16 U | µg/Kg |
| Fluorene | 3.3 U | µg/Kg |
| Phenanthrene | 33 U | µg/Kg |
| Anthracene | 6.6 U | µg/Kg |
| Fluoranthene | 3.3 U | µg/Kg |
| Pyrene | 3.3 U | µg/Kg |
| Benzo(a)anthracene | 9.9 U | µg/Kg |
| Chrysene | 3.3 U | µg/Kg |
| Benzo(b)fluoranthene | 3.3 U | µg/Kg |
| Benzo(k)fluoranthene | 3.3 U | µg/Kg |
| Benzo(a)pyrene | 3.3 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.3 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.3 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.3 U | µg/Kg |

Surrogate:% RECOVLIMITS

| | | |
|----------------|----------|--------|
| p-terphenyl | 101 | 39-141 |
| Date Extracted | 06/02/00 | |
| Date Analyzed | 06/05/00 | |

EPA METHOD 504 -
ETHYLENE DIBROMIDE

LAB BLANK

Units

| | | |
|--------------------|----------|------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
 PROJECT NAME : Mayport Naval Station
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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------|---------------|------------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 06/05/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---|------------------|---------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 75 | 65-140 |
| Nonatriacontane | 62 | 71-139 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---|------------------|---------------|
| Hydrocarbons (C8-C40) | 6.6 U | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 99 | 51-148 |
| Date Extracted | 06/07/00 | |
| Date Analyzed | 06/08/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONSLAB BLANKUnits

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:% RECOVLIMITS

Bromofluorobenzene

95

37-161

Date Analyzed

06/04/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICSLAB BLANKUnits

Methyl tert-butyl ether
Benzene
Toluene
Chlorobenzene
Ethylbenzene
m-Xylene & p-Xylene
o-Xylene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene

2.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U

µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L

Surrogate:

Bromofluorobenzene
Date Analyzed

% RECOV
129
06/04/00

LIMITS
59-132

EPA METHOD 8021 -
VOLATILE ORGANICSLAB BLANKUnits

Methyl tert-butyl ether
Benzene
Toluene
Chlorobenzene
Ethylbenzene
m-Xylene & p-Xylene
o-Xylene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene

2.0 U
1.0 U
1.0 U
1.0 U
1.0 U
2.0 U
1.0 U
1.0 U
1.0 U
1.0 U

µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg

Surrogate:

Bromofluorobenzene
Date Analyzed

% RECOV
94
06/05/00

LIMITS
28-165

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

LAB BLANK

Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

% RECOV

LIMITS

Bromofluorobenzene
Date Analyzed

99
06/06/00

37-161

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

LAB BLANK

Units

Methyl tert-butyl ether
Benzene
Toluene
Chlorobenzene
Ethylbenzene
m-Xylene & p-Xylene
o-Xylene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene

2.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U

µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L

Surrogate:

% RECOV

LIMITS

Bromofluorobenzene
Date Analyzed

115
06/06/00

59-132

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 601</u> | | | | |
| Methylene Chloride | 120/ 89/102 | 51-155 | 30 | 29 |
| Chloroform | 129/ 97/107 | 63-145 | 28 | 16 |
| Carbon Tetrachloride | 137/ 89/116 | 64-146 | 42 | 21 |
| Trichloroethene | 125/ 86/ 98 | 60-140 | 37 | 24 |
| Tetrachloroethene | 115/ 88/109 | 66-146 | 27 | 21 |
| Chlorobenzene | 121/101/113 | 70-137 | 18 | 19 |
| <u>EPA Method 602</u> | | | | |
| Benzene | 116/ 91/ 97 | 60-138 | 24 | 17 |
| Toluene | 121/112/128 | 57-138 | 8 | 16 |
| Ethylbenzene | 125/116/128 | 49-144 | 7 | 17 |
| o-Xylene | 122/112/121 | 50-151 | 8 | 17 |
| <u>EPA Method 8021</u> | | | | |
| Benzene | 80/ 76/ 79 | 59-144 | 5 | 25 |
| Toluene | 82/ 73/ 77 | 67-132 | 12 | 58 |
| Ethylbenzene | 72/ 71/ 74 | 60-169 | 1 | 28 |
| o-Xylene | 82/ 77/ 81 | 62-183 | 6 | 24 |
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 81/ 77/ 69 | 59-111 | 5 | 12 |
| Acenaphthene | 98/ 93/ 78 | 58-128 | 5 | 13 |
| Benzo(a)pyrene | 111/101/ 90 | 78-134 | 9 | 15 |
| Benzo(g,h,i)perylene | 100/ 91/ 84 | 62-115 | 9 | 30 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

ENCO LABORATORIES

REPORT # : JAX11568

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 42 Of 42

QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|------------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 84/ 82/ 84 | 48-130 | 2 | 20 |
| Acenaphthene | 98/ 98/ 97 | 36-127 | <1 | 17 |
| Benzo(a)pyrene | 94/106/ 79 | 64-141 | 12 | 22 |
| Benzo(g,h,i)perylene | 99/ 98/112 | 58-168 | 1 | 21 |
| <u>EPA Method 504</u> | | | | |
| Ethylene Dibromide | 120/110/112 | 58-135 | 9 | 22 |
| <u>TOTAL METALS</u> | | | | |
| Lead, 200.7 | 102/102/103 | 68-126 | <1 | 19 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 81/ 81/ 79 | 51-163 | <1 | 27 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 88/ 89/ 84 | 62-204 | 1 | 25 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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ENVIRONMENTAL CONSERVATION LABORATORIES

4810 Executive Park Court, Suite 211
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1015 Passport Way
Cary, North Carolina 27513
Ph. (919) 677-1669 • Fax (919) 677-9846

CHAIN OF CUSTODY RECORD

| PROJECT NO. 81423301 | | PO NUMBER | | MATRIX TYPE | | REQUIRED ANALYSIS | | PAGE 1 OF 1 | | | | | |
|--------------------------------------|----------------|------------------------------|------------------------|--------------------------|--------------------------|------------------------|------------------------|--------------------------|----------------|---------------------|-------------|--------------------------|-------|
| PROJECT LOC (State) | SAMPLER'S NAME | CLIENT PROJECT/ADDRESS | CLIENT PROJECT/ADDRESS | CLIENT PROJECT/ADDRESS | CLIENT PROJECT/ADDRESS | CLIENT PROJECT/ADDRESS | CLIENT PROJECT/ADDRESS | CLIENT PROJECT/ADDRESS | | | | | |
| FL | Richard Morady | Environmental Recovery, Inc. | Mr. Chuck Nevins | 251 Levy Road | Atlantic Beach, FL 32233 | | | | | | | | |
| STATION | DATE | TIME | GRAB | COMP | SAMPLE IDENTIFICATION | SURFACE WATER | GROUND WATER | WASTEWATER | DRINKING WATER | SOIL/SOLID/SEDIMENT | AIR | SLUDGE | OTHER |
| 1#1 | 5/31/00 | 09:30 | X | | CS-74 | | | | | | | | |
| 2#2 | 5/31/00 | 10:05 | X | | CS-75 | | | | | | | | |
| 3#3 | 5/31/00 | 10:40 | X | | CS-76 | | | | | | | | |
| 4#4 | 5/31/00 | 11:10 | X | | CS-77 | | | | | | | | |
| 5#5 | 5/31/00 | 11:40 | X | | CS-78 | | | | | | | | |
| 6 | | | | | | | | | | | | | |
| 7#1 | 5/31/00 | 14:40 | X | | TMW-74 | X | | | | | | | |
| 8#2 | 5/31/00 | 15:20 | X | | TMW-75 | X | | | | | | | |
| 9#3 | 5/31/00 | 16:00 | X | | TMW-76 | X | | | | | | | |
| 10#4 | 5/31/00 | 16:40 | X | | TMW-77 | X | | | | | | | |
| 11#5 | 5/31/00 | 17:15 | X | | TMW-78 | X | | | | | | | |
| 12 | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | |
| SAMPLE KIT PREPARED BY: JACKSONVILLE | | DATE: 5/30/00 | TIME: 8:20 | RECEIVED BY: (SIGNATURE) | | DATE: 5/31/00 | TIME: 18:50 | RECEIVED BY: (SIGNATURE) | | DATE: 5/31/00 | TIME: 18:50 | RECEIVED BY: (SIGNATURE) | |
| RECEIVED BY: (SIGNATURE) | | DATE: 5/31/00 | TIME: 18:50 | RECEIVED BY: (SIGNATURE) | | DATE: 5/31/00 | TIME: 18:50 | RECEIVED BY: (SIGNATURE) | | DATE: 5/31/00 | TIME: 18:50 | RECEIVED BY: (SIGNATURE) | |
| RECEIVED BY: (SIGNATURE) | | DATE: 5/31/00 | TIME: 18:50 | RECEIVED BY: (SIGNATURE) | | DATE: 5/31/00 | TIME: 18:50 | RECEIVED BY: (SIGNATURE) | | DATE: 5/31/00 | TIME: 18:50 | RECEIVED BY: (SIGNATURE) | |
| RECEIVED BY: (SIGNATURE) | | DATE: 5/31/00 | TIME: 18:50 | RECEIVED BY: (SIGNATURE) | | DATE: 5/31/00 | TIME: 18:50 | RECEIVED BY: (SIGNATURE) | | DATE: 5/31/00 | TIME: 18:50 | RECEIVED BY: (SIGNATURE) | |

REMARKS: Each sample kit consists of:
Soil: 3x5gms Enclave
1x 1026hrs wrap
6W: 2x 40ml vials (40L) (600)
2x 40ml vials (wrap) (600)
1x 1000ml 600hrs wrap (600)
2x 1000ml 600hrs (4x50) (600)
1x 500ml poly (wrap) (600)
Sample containers sealed in poly bags and placed on wet ice (600)
Samples HAND-DELIVERED to Enco Jax 5/31/00 (600)

Environmental Conservation Laboratories, Inc.
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210
www.encolabs.com



DHRS Certification No. E82277

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX11582
DATE SUBMITTED: June 1, 2000
DATE REPORTED : June 12, 2000

PAGE 1 OF 42

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:


PROJECT #: 2339

Mayport Naval Station Tank #203

06/01/00

| | | | | |
|-----|---|--------|---|-------|
| #1 | - | CS-9 | @ | 09:35 |
| #2 | - | CS-10 | @ | 10:00 |
| #3 | - | CS-11 | @ | 10:30 |
| #4 | - | CS-12 | @ | 10:50 |
| #5 | - | CS-13 | @ | 12:55 |
| #6 | - | TMW-9 | @ | 13:45 |
| #7 | - | TMW-10 | @ | 14:30 |
| #8 | - | TMW-11 | @ | 15:05 |
| #9 | - | TMW-12 | @ | 15:45 |
| #10 | - | TMW-13 | @ | 16:20 |

PROJECT MANAGER


Scott D. Martin

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 2 OF 42

RESULTS OF ANALYSIS

EPA METHOD 8021 -
VOLATILE ORGANICS

| | <u>CS-9</u> | <u>Units</u> |
|-------------------------|----------------|---------------|
| Methyl tert-butyl ether | 5.0 U D1 | µg/Kg |
| Benzene | 2.8 U D1 | µg/Kg |
| Toluene | 2.8 U D1 | µg/Kg |
| Chlorobenzene | 2.8 U D1 | µg/Kg |
| Ethylbenzene | 2.8 U D1 | µg/Kg |
| m-Xylene & p-Xylene | 5.0 U D1 | µg/Kg |
| o-Xylene | 2.0 U D1 | µg/Kg |
| 1,3-Dichlorobenzene | 2.0 I D1 | µg/Kg |
| 1,4-Dichlorobenzene | 2.0 U D1 | µg/Kg |
| 1,2-Dichlorobenzene | 2.0 U D1 | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 126 | 28-165 |
| Date Analyzed | 06/04/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>CS-9</u> | <u>Units</u> |
|-----------------------|----------------|---------------|
| Hydrocarbons (C8-C40) | 8.2 U | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 79 | 51-148 |
| Date Extracted | 06/07/00 | |
| Date Analyzed | 06/08/00 | |

U = Compound was analyzed for but not detected to the level shown.
I = Analyte detected; value is between the Method Detection Level (MDL)
and the Practical Quantitation Level (PQL).
D1 = Analyte value determined from a 1:2.17 dilution.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 3 OF 42

RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | CS-9 | Units |
|------------------------|-------|-------|
| Naphthalene | 21 U | µg/Kg |
| Acenaphthylene | 41 U | µg/Kg |
| 1-Methylnaphthalene | 41 U | µg/Kg |
| 2-Methylnaphthalene | 41 U | µg/Kg |
| Acenaphthene | 21 U | µg/Kg |
| Fluorene | 4.1 U | µg/Kg |
| Phenanthrene | 41 U | µg/Kg |
| Anthracene | 8.2 U | µg/Kg |
| Fluoranthene | 4.1 U | µg/Kg |
| Pyrene | 4.1 U | µg/Kg |
| Benzo(a)anthracene | 12 U | µg/Kg |
| Chrysene | 4.1 U | µg/Kg |
| Benzo(b)fluoranthene | 4.1 U | µg/Kg |
| Benzo(k)fluoranthene | 4.1 U | µg/Kg |
| Benzo(a)pyrene | 4.1 U | µg/Kg |
| Dibenzo(a,h)anthracene | 4.1 U | µg/Kg |
| Benzo(g,h,i)perylene | 4.1 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 4.1 U | µg/Kg |

Surrogate:

| | % RECOV | LIMITS |
|----------------|----------|--------|
| p-terphenyl | 91 | 39-141 |
| Date Extracted | 06/07/00 | |
| Date Analyzed | 06/09/00 | |

MISCELLANEOUS

METHOD

CS-9

Units

| | | | |
|----------------|---------|----------|---|
| Percent Solids | SM2540G | 80 | % |
| Date Analyzed | | 06/04/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8021 -
VOLATILE ORGANICSCS-10Units

| | | |
|-------------------------|----------|-------|
| Methyl tert-butyl ether | 5.0 U D2 | µg/Kg |
| Benzene | 2.2 U D2 | µg/Kg |
| Toluene | 2.2 U D2 | µg/Kg |
| Chlorobenzene | 2.2 U D2 | µg/Kg |
| Ethylbenzene | 2.2 U D2 | µg/Kg |
| m-Xylene & p-Xylene | 5.0 U D2 | µg/Kg |
| o-Xylene | 2.0 U D2 | µg/Kg |
| 1,3-Dichlorobenzene | 2.0 U D2 | µg/Kg |
| 1,4-Dichlorobenzene | 2.0 U D2 | µg/Kg |
| 1,2-Dichlorobenzene | 2.0 U D2 | µg/Kg |

Surrogate:% RECOVLIMITSBromofluorobenzene
Date Analyzed108
06/04/00

28-165

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.CS-10Units

| | | |
|-----------------------|-------|-------|
| Hydrocarbons (C8-C40) | 7.7 U | mg/Kg |
|-----------------------|-------|-------|

Surrogate:% RECOVLIMITS

| | | |
|----------------|----------|--------|
| o-Terphenyl | 89 | 51-148 |
| Date Extracted | 06/07/00 | |
| Date Analyzed | 06/08/00 | |

U = Compound was analyzed for but not detected to the level shown.
D2 = Analyte value determined from a 1:1.92 dilution.

ENCO LABORATORIES

REPORT # : JAX11582
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
 PROJECT NAME : Mayport Naval Station
 Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>CS-10</u> | <u>Units</u> |
|------------------------|--------------|--------------|
| Naphthalene | 19 U | µg/Kg |
| Acenaphthylene | 38 U | µg/Kg |
| 1-Methylnaphthalene | 38 U | µg/Kg |
| 2-Methylnaphthalene | 38 U | µg/Kg |
| Acenaphthene | 19 U | µg/Kg |
| Fluorene | 3.8 U | µg/Kg |
| Phenanthrene | 38 U | µg/Kg |
| Anthracene | 7.7 U | µg/Kg |
| Fluoranthene | 3.8 U | µg/Kg |
| Pyrene | 3.8 U | µg/Kg |
| Benzo(a)anthracene | 12 U | µg/Kg |
| Chrysene | 3.8 U | µg/Kg |
| Benzo(b)fluoranthene | 3.8 U | µg/Kg |
| Benzo(k)fluoranthene | 3.8 U | µg/Kg |
| Benzo(a)pyrene | 3.8 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.8 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.8 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.8 U | µg/Kg |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| p-terphenyl | 80 | 39-141 |
| Date Extracted | 06/07/00 | |
| Date Analyzed | 06/09/00 | |

| <u>MISCELLANEOUS</u> | <u>METHOD</u> | <u>CS-10</u> | <u>Units</u> |
|----------------------|---------------|--------------|--------------|
| Percent Solids | SM2540G | 86 | % |
| Date Analyzed | | 06/04/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8021 -
VOLATILE ORGANICSCS-11Units

Methyl tert-butyl ether
Benzene
Toluene
Chlorobenzene
Ethylbenzene
m-Xylene & p-Xylene
o-Xylene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene

3.0 U D3
1.7 U D3
14 D3
1.7 U D3
1.7 U D3
4.0 I D3
2.0 I D3
2.0 U D3
2.0 U D3
2.0 U D3

µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg

Surrogate:% RECOVLIMITS

Bromofluorobenzene
Date Analyzed

103
06/04/00

28-165

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.CS-11Units

Hydrocarbons (C3-C40)

7.2 U

mg/Kg

Surrogate:% RECOVLIMITS

o-Terphenyl
Date Extracted
Date Analyzed

79
06/07/00
06/08/00

51-148

U = Compound was analyzed for but not detected to the level shown.
I = Analyte detected; value is between the Method Detection Level (MDL)
and the Practical Quantitation Level (PQL).
D3 = Analyte value determined from a 1:1.61 dilution.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLCCS-11Units

| | | |
|------------------------|-------|-------|
| Naphthalene | 18 U | µg/Kg |
| Acenaphthylene | 36 U | µg/Kg |
| 1-Methylnaphthalene | 36 U | µg/Kg |
| 2-Methylnaphthalene | 36 U | µg/Kg |
| Acenaphthene | 18 U | µg/Kg |
| Fluorene | 3.6 U | µg/Kg |
| Phenanthrene | 36 U | µg/Kg |
| Anthracene | 7.2 U | µg/Kg |
| Fluoranthene | 3.6 U | µg/Kg |
| Pyrene | 3.6 U | µg/Kg |
| Benzo(a)anthracene | 11 U | µg/Kg |
| Chrysene | 3.6 U | µg/Kg |
| Benzo(b)fluoranthene | 3.6 U | µg/Kg |
| Benzo(k)fluoranthene | 3.6 U | µg/Kg |
| Benzo(a)pyrene | 3.6 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.6 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.6 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.6 U | µg/Kg |

Surrogate:% RECOVLIMITS

p-terphenyl

97

39-141

Date Extracted

06/07/00

Date Analyzed

06/09/00

MISCELLANEOUSMETHODCS-11Units

Percent Solids

SM2540G

92

%

Date Analyzed

06/04/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 8 OF 42

RESULTS OF ANALYSIS

EPA METHOD 8021 -
VOLATILE ORGANICSCS-12Units

Methyl tert-butyl ether
Benzene
Toluene
Chlorobenzene
Ethylbenzene
m-Xylene & p-Xylene
o-Xylene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene

4.0 U D2
2.2 U D2
14 D2
2.2 U D2
2.2 U D2
4.0 I D2
2.0 I D2
2.0 U D2
2.0 U D2
2.0 U D2

µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg

Surrogate:% RECOVLIMITS

Bromofluorobenzene
Date Analyzed

85
06/04/00

28-165

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.CS-12Units

Hydrocarbons (C8-C40)

7.5 U

mg/Kg

Surrogate:% RECOVLIMITS

O-Terphenyl
Date Extracted
Date Analyzed

88
06/07/00
06/08/00

51-148

U = Compound was analyzed for but not detected to the level shown.

I = Analyte detected; value is between the Method Detection Level (MDL)
and the Practical Quantitation Level (PQL).

D2 = Analyte value determined from a 1:1.92 dilution.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLCCS-12Units

| | | |
|------------------------|-------|-------|
| Naphthalene | 19 U | µg/Kg |
| Acenaphthylene | 38 U | µg/Kg |
| 1-Methylnaphthalene | 38 U | µg/Kg |
| 2-Methylnaphthalene | 38 U | µg/Kg |
| Acenaphthene | 19 U | µg/Kg |
| Fluorene | 3.8 U | µg/Kg |
| Phenanthrene | 38 U | µg/Kg |
| Anthracene | 7.5 U | µg/Kg |
| Fluoranthene | 3.8 U | µg/Kg |
| Pyrene | 3.8 U | µg/Kg |
| Benzo(a)anthracene | 11 U | µg/Kg |
| Chrysene | 3.8 U | µg/Kg |
| Benzo(b)fluoranthene | 3.8 U | µg/Kg |
| Benzo(k)fluoranthene | 3.8 U | µg/Kg |
| Benzo(a)pyrene | 3.8 U | µg/Kg |
| Dibenzo(a,h)anthracene | 13 | µg/Kg |
| Benzo(g,h,i)perylene | 3.8 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 8.5 | µg/Kg |

Surrogate:% RECOVLIMITS

p-terphenyl

92

39-141

Date Extracted

06/07/00

Date Analyzed

06/09/00

MISCELLANEOUSMETHODCS-12Units

Percent Solids

SM2540G

88

%

Date Analyzed

06/04/00

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
 PROJECT NAME : Mayport Naval Station
 Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8021 -
VOLATILE ORGANICS

| | <u>CS-13</u> | <u>Units</u> |
|-------------------------|--------------|--------------|
| Methyl tert-butyl ether | 2.0 U D4 | µg/Kg |
| Benzene | 1.0 U D4 | µg/Kg |
| Toluene | 5.0 I D4 | µg/Kg |
| Chlorobenzene | 1.4 U D4 | µg/Kg |
| Ethylbenzene | 1.4 U D4 | µg/Kg |
| m-Xylene & p-Xylene | 2.0 U D4 | µg/Kg |
| o-Xylene | 1.0 I D4 | µg/Kg |
| 1,3-Dichlorobenzene | 1.0 U D4 | µg/Kg |
| 1,4-Dichlorobenzene | 1.0 U D4 | µg/Kg |
| 1,2-Dichlorobenzene | 1.0 U D4 | µg/Kg |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|---------------|
| Bromofluorobenzene | 86 | 28-165 |
| Date Analyzed | 06/04/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>CS-13</u> | <u>Units</u> |
|-----------------------|--------------|--------------|
| Hydrocarbons (C8-C40) | 7.8 U | mg/Kg |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| o-Terphenyl | 72 | 51-148 |
| Date Extracted | 06/07/00 | |
| Date Analyzed | 06/08/00 | |

U = Compound was analyzed for but not detected to the level shown.
 I = Analyte detected; value is between the Method Detection Level (MDL)
 and the Practical Quantitation Level (PQL).
 D4 = Analyte value determined from a 1:1.25 dilution.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

CS-13

Units

| | | |
|------------------------|-------|-------|
| Naphthalene | 19 U | µg/Kg |
| Acenaphthylene | 39 U | µg/Kg |
| 1-Methylnaphthalene | 39 U | µg/Kg |
| 2-Methylnaphthalene | 39 U | µg/Kg |
| Acenaphthene | 19 U | µg/Kg |
| Fluorene | 3.9 U | µg/Kg |
| Phenanthrene | 39 U | µg/Kg |
| Anthracene | 7.8 U | µg/Kg |
| Fluoranthene | 3.9 U | µg/Kg |
| Pyrene | 3.9 U | µg/Kg |
| Benzo(a)anthracene | 12 U | µg/Kg |
| Chrysene | 3.9 U | µg/Kg |
| Benzo(b)fluoranthene | 3.9 U | µg/Kg |
| Benzo(k)fluoranthene | 3.9 U | µg/Kg |
| Benzo(a)pyrene | 3.9 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.9 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.9 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.9 U | µg/Kg |

Surrogate:

% RECOV

LIMITS

| | | |
|----------------|----------|--------|
| p-terphenyl | 101 | 39-141 |
| Date Extracted | 06/07/00 | |
| Date Analyzed | 06/10/00 | |

MISCELLANEOUS

METHOD

CS-13

Units

| | | | |
|----------------|---------|----------|---|
| Percent Solids | SM2540G | 85 | % |
| Date Analyzed | | 06/04/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 12 OF 42

RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

TMW-9

Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

% RECOV

LIMITS

Bromofluorobenzene

102

37-161

Date Analyzed

06/03/00

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>TMW-9</u> | <u>Units</u> |
|-------------------------|--------------|--------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

Bromofluorobenzene

Date Analyzed

% RECOV
132
06/03/00

LIMITS
59-132

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

| | TMW-9 | Units |
|------------------------|--------|-------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:

p-terphenyl

Date Extracted

Date Analyzed

% RECOV

107

06/06/00

06/08/00

LIMITS

43-148

EPA METHOD 504 -

ETHYLENE DIBROMIDE

| | TMW-9 | Units |
|--------------------|----------|-------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-9</u> | <u>Units</u> |
|---------------------|---------------|--------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 06/06/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TMW-9</u> | <u>Units</u> |
|---|--------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| o-Terphenyl | 90 | 65-140 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 601 -

VOLATILE HALOCARBONSTMW-10Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 I | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:% RECOVLIMITS

Bromofluorobenzene

68

37-161

Date Analyzed

06/07/00

U = Compound was analyzed for but not detected to the level shown.

I = Analyte detected; value is between the Method Detection Level (MDL)
and the Practical Quantitation Level (PQL).

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>TMW-10</u> | <u>Units</u> |
|-------------------------|---------------|--------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|---------------|
| Bromofluorobenzene | 95 | 59-132 |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | TMW-10 | Units |
|------------------------|--------|-------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:

| | % RECOV | LIMITS |
|----------------|----------|--------|
| p-terphenyl | 86 | 43-148 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/08/00 | |

EPA METHOD 504 -
ETHYLENE DIBROMIDE

| | TMW-10 | Units |
|--------------------|----------|-------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-10</u> | <u>Units</u> |
|---------------------|---------------|---------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 06/06/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TMW-10</u> | <u>Units</u> |
|---|---------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| o-Terphenyl | 90 | 65-140 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONSTMW-11Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:% RECOVLIMITS

Bromofluorobenzene

90

37-161

Date Analyzed

06/06/00

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>TMW-11</u> | <u>Units</u> |
|-------------------------|---------------|--------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|---------------|
| Bromofluorobenzene | 109 | 59-132 |
| Date Analyzed | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | TMW-11 | Units |
|------------------------|--------|-------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:

| | % RECOV | LIMITS |
|----------------|----------|--------|
| p-terphenyl | 108 | 43-148 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/08/00 | |

EPA METHOD 504 -
ETHYLENE DIBROMIDE

| | TMW-11 | Units |
|--------------------|----------|-------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-11</u> | <u>Units</u> |
|---------------------|---------------|---------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 06/06/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TMW-11</u> | <u>Units</u> |
|---|---------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| o-Terphenyl | 59 | 65-140 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONSTMW-12Units

| | | |
|---------------------------|-------|------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:% RECOVLIMITS

Bromofluorobenzene

69

37-161

Date Analyzed

06/07/00

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>TMW-12</u> | <u>Units</u> |
|-------------------------|---------------|--------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|---------------|
| Bromofluorobenzene | 97 | 59-132 |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | TMW-12 | Units |
|------------------------|--------|-------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:

| | % RECOV | LIMITS |
|----------------|----------|--------|
| p-terphenyl | 107 | 43-148 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/08/00 | |

EPA METHOD 504 -
ETHYLENE DIBROMIDE

| | TMW-12 | Units |
|--------------------|----------|-------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-12</u> | <u>Units</u> |
|---------------------|---------------|---------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 06/06/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TMW-12</u> | <u>Units</u> |
|---|----------------|---------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 68 | 65-140 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

| | TMW-13 | Units |
|---------------------------|--------|-------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

Bromofluorobenzene
Date Analyzed

% RECOV

91
06/06/00

LIMITS

37-161

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>TMW-13</u> | <u>Units</u> |
|-------------------------|---------------|--------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|---------------|
| Bromofluorobenzene | 116 | 59-132 |
| Date Analyzed | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

| | TMW-13 | Units |
|------------------------|--------|-------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:

| | % RECOV | LIMITS |
|----------------|----------|--------|
| p-terphenyl | 105 | 43-148 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/08/00 | |

EPA METHOD 504 -

ETHYLENE DIBROMIDE

| | TMW-13 | Units |
|--------------------|----------|-------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
 PROJECT NAME : Mayport Naval Station
 Tank #203

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TMW-13</u> | <u>Units</u> |
|---------------------|---------------|---------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 06/06/00 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>TMW-13</u> | <u>Units</u> |
|---|----------------|---------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-Terphenyl | 85 | 65-140 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

| | LAB BLANK | Units |
|---------------------------|-----------|-------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

Bromofluorobenzene
Date Analyzed% RECOV
100
06/03/00LIMITS
37-161

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>LAB BLANK</u> | <u>Units</u> |
|-------------------------|------------------|---------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 131 | 59-132 |
| Date Analyzed | 06/03/00 | |

EPA METHOD 8021 -
VOLATILE ORGANICS

| | <u>LAB BLANK</u> | <u>Units</u> |
|-------------------------|------------------|---------------|
| Methyl tert-butyl ether | 2.0 U | µg/Kg |
| Benzene | 1.0 U | µg/Kg |
| Toluene | 1.0 U | µg/Kg |
| Chlorobenzene | 1.0 U | µg/Kg |
| Ethylbenzene | 1.0 U | µg/Kg |
| m-Xylene & p-Xylene | 2.0 U | µg/Kg |
| o-Xylene | 1.0 U | µg/Kg |
| 1,3-Dichlorobenzene | 1.0 U | µg/Kg |
| 1,4-Dichlorobenzene | 1.0 U | µg/Kg |
| 1,2-Dichlorobenzene | 1.0 U | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 89 | 28-165 |
| Date Analyzed | 06/04/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

| | <u>LAB BLANK</u> | <u>Units</u> |
|------------------------|------------------|---------------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-terphenyl | 104 | 43-148 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | LAB BLANK | Units |
|------------------------|-----------|-------|
| Naphthalene | 16 U | µg/Kg |
| Acenaphthylene | 33 U | µg/Kg |
| 1-Methylnaphthalene | 33 U | µg/Kg |
| 2-Methylnaphthalene | 33 U | µg/Kg |
| Acenaphthene | 16 U | µg/Kg |
| Fluorene | 3.3 U | µg/Kg |
| Phenanthrene | 33 U | µg/Kg |
| Anthracene | 6.6 U | µg/Kg |
| Fluoranthene | 3.3 U | µg/Kg |
| Pyrene | 3.3 U | µg/Kg |
| Benzo(a)anthracene | 9.9 U | µg/Kg |
| Chrysene | 3.3 U | µg/Kg |
| Benzo(b)fluoranthene | 3.3 U | µg/Kg |
| Benzo(k)fluoranthene | 3.3 U | µg/Kg |
| Benzo(a)pyrene | 3.3 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.3 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.3 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.3 U | µg/Kg |

Surrogate:

| | % RECOV | LIMITS |
|----------------|----------|--------|
| p-terphenyl | 90 | 39-141 |
| Date Extracted | 06/07/00 | |
| Date Analyzed | 06/09/00 | |

EPA METHOD 504 -
ETHYLENE DIBROMIDE

| | LAB BLANK | Units |
|--------------------|-----------|-------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------|---------------|------------------|--------------|
| Lead | 200.7 | 0.0050 U | mg/L |
| Date Analyzed | | 06/06/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>LAB BLANK</u> | <u>Units</u> |
|-----------------------|------------------|---------------|
| Hydrocarbons (C8-C40) | 0.20 U | mg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 75 | 65-140 |
| Date Extracted | 06/06/00 | |
| Date Analyzed | 06/07/00 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>LAB BLANK</u> | <u>Units</u> |
|-----------------------|------------------|---------------|
| Hydrocarbons (C8-C40) | 6.6 U | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| o-Terphenyl | 99 | 51-148 |
| Date Extracted | 06/07/00 | |
| Date Analyzed | 06/08/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 601 -

VOLATILE HALOCARBONS

| | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------------|------------------|--------------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

Bromofluorobenzene

Date Analyzed

% RECOV

99

06/06/00

LIMITS

37-161

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>LAB BLANK</u> | <u>Units</u> |
|-------------------------|------------------|--------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |

Surrogate:

| | | |
|--------------------|----------------|---------------|
| Bromofluorobenzene | <u>% RECOV</u> | <u>LIMITS</u> |
| Date Analyzed | 115 | 59-132 |
| | 06/06/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

| | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------------|------------------|---------------|
| Dichlorodifluoromethane | 1.0 U | µg/L |
| Chloromethane | 2.0 U | µg/L |
| Vinyl Chloride | 1.0 U | µg/L |
| Bromomethane | 1.0 U | µg/L |
| Chloroethane | 2.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | µg/L |
| Methylene Chloride | 2.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | µg/L |
| Chloroform | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Bromoform | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 76 | 37-161 |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582
 DATE REPORTED: June 12, 2000
 REFERENCE : 2339
 PROJECT NAME : Mayport Naval Station
 Tank #203

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>LAB BLANK</u> | <u>Units</u> |
|-------------------------|------------------|---------------|
| Methyl tert-butyl ether | 2.0 U | µg/L |
| Benzene | 1.0 U | µg/L |
| Toluene | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | µg/L |
| o-Xylene | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 115 | 59-132 |
| Date Analyzed | 06/07/00 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 601</u> | | | | |
| Methylene Chloride | 120/ 89/102 | 51-155 | 30 | 29 |
| Chloroform | 129/ 97/107 | 63-145 | 28 | 16 |
| Carbon Tetrachloride | 137/ 89/116 | 64-146 | 42 | 21 |
| Trichloroethene | 125/ 86/ 98 | 60-140 | 37 | 24 |
| Tetrachloroethene | 115/ 88/109 | 66-146 | 27 | 21 |
| Chlorobenzene | 121/101/113 | 70-137 | 18 | 19 |
| <u>EPA Method 602</u> | | | | |
| Benzene | 116/ 91/ 97 | 60-138 | 24 | 17 |
| Toluene | 121/112/128 | 57-138 | 8 | 16 |
| Ethylbenzene | 125/116/128 | 49-144 | 7 | 17 |
| o-Xylene | 122/112/121 | 50-151 | 8 | 17 |
| <u>EPA Method 8021</u> | | | | |
| Benzene | 80/ 76/ 79 | 59-144 | 5 | 25 |
| Toluene | 82/ 73/ 77 | 67-132 | 12 | 58 |
| Ethylbenzene | 72/ 71/ 74 | 60-169 | 1 | 28 |
| o-Xylene | 82/ 77/ 81 | 62-183 | 6 | 24 |
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 81/ 77/ 69 | 59-111 | 5 | 12 |
| Acenaphthene | 98/ 93/ 78 | 58-128 | 5 | 13 |
| Benzo(a)pyrene | 111/101/ 90 | 78-134 | 9 | 15 |
| Benzo(g,h,i)perylene | 100/ 91/ 84 | 62-115 | 9 | 30 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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ENCO LABORATORIES

REPORT # : JAX11582

DATE REPORTED: June 12, 2000

REFERENCE : 2339

PROJECT NAME : Mayport Naval Station
Tank #203

PAGE 42 OF 42

QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY MS/MSD/LCS</u> | <u>ACCEPT LIMITS</u> | <u>% RPD MS/MSD</u> | <u>ACCEPT LIMITS</u> |
|------------------------------|----------------------------------|--------------------------|-------------------------|--------------------------|
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 80/ 83/ 77 | 48-130 | 4 | 20 |
| Acenaphthene | 91/ 95/ 86 | 36-127 | 4 | 17 |
| Benzo(a)pyrene | 91/ 93/ 79 | 64-141 | 2 | 22 |
| Benzo(g,h,i)perylene | 96/101/ 85 | 58-168 | 5 | 21 |
| <u>EPA Method 504</u> | | | | |
| Ethylene Dibromide | 120/110/112 | 58-135 | 9 | 22 |
| <u>TOTAL METALS</u> | | | | |
| Lead, 200.7 | 105/104/106 | 68-126 | <1 | 19 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 81/ 81/ 79 | 51-163 | <1 | 27 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 88/ 89/ 84 | 62-204 | 1 | 25 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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ATTACHMENT B

Well Sampling Field Logs



Well Sampling Log

Date: 5/30/07 Time: 14:15 Project Number: 2339
 Site Location: Marquette F-1 Fuel Tank - Tank #203
 Well I.D. 1.75 Depth of well (from TOC) 10.50 ft Depth to water 8.37 ft
 Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft
 Well Diameter 2 in. Well Construction _____ ft. in. slotted screen Casing Material pvc
 Well Volume 0.45 (0.5) gal Well Vol = $\frac{\pi}{4} \times \frac{1}{12} \times 10.50^2 \times 0.163 = 0.45$ gal/vol
 $H = 10.50 / TD - 8.37 / DTW = 2.13$ ft
 Well Type: _____ upgradient _____ downgradient _____ hot spot _____ other

Longitude _____ Latitude _____

Purge Information:

Purging eqpt: Peristaltic Pump
 Purge Start Time: 14:39

Purge rate: 0.2 gal/min.

Well Recharge Rate: Slow to moderate

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|-------------|--------------|-------------|------|-------|
| 1 | 0.5 | | | | | |
| 2 | 1.0 | | | | | |
| 3 | 1.5 | | | | | |
| 4 | 2.0 | | | | | |
| 5 | 2.5 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | <u>7.75</u> | <u>247</u> | <u>25.6</u> | | |

Purge Stop Time: 14:53

Total gallons purged: 2.5

Sample Information:

Sample Collection Time: 14:55

Sample Collected Using: 700 Bore

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|--------------------|--------------------|--------------------|---------------------|--------------------|---|
| Sample Parameters | 602 | 603 | 610 | Fl 210 | Mel 61 | |
| Sample Containers | 2x 400 ml Vials | 2x 400 ml Vials | 1x 200 ml glass | 2x 1000 ml glass | 1x 500 ml glass | |
| pH of Preserved Samples | HCL | UN | UN | H2SO4 | HNO3 | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: _____ Color: h. clear Turbidity: h. clear

Comments: (610) Turbidity - 1.2 NTU

Field Instrument Information:

Instruments Used: Dr. Oetiker 700 g/l, 130 conductivity, 1 ATC 1000 ml, 1 Temp

Calibration: pH 4.0 7.0 10.0 Conductivity: 447 Time/Date: 5/30/07

Ambient Conditions: Warm (60°F)

Field Personnel (name/title): John J. Smith / Environmental Scientist

Sample delivered to laboratory by: _____



Well Sampling Log

Date: 5/30/00 Time: 15:15 Project Number: 2339
 Site Location: Wing Point Fuel Tank - Tank #230
 Well I.D. 1 1/2" - 13 Depth of well (from TOC) 7.60 ft Depth to water 5.66 ft
 Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft
 Well Diameter _____ in. Well Construction _____ ft. in. slotted screen Casing Material PVC
 Well Volume 0.33 gal Well Vol = $\frac{1.4}{H} \times \frac{1}{1^2} \times 0.163 = 0.376$ gal/vol
 $H = 7.60$ /TD - 5.66 /DTW = 1.94 ft
 Well Type: _____ upgradient _____ downgradient _____ hot spot _____ other _____
 Longitude _____ Latitude _____
 Purge Information: _____
 Purging eqpt: Peristaltic Pump Purge rate: 0.1 gal/min. 163
 Purge Start Time: 15:27 Well Recharge Rate: 30W 326

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|------|--------------|------------|------|-------|
| 1 | 2.4 | | | | | |
| 2 | 0.8 | | | | | |
| 3 | 4.2 | | | | | |
| 4 | 1.6 | | | | | |
| 5 | 2.0 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | 9.70 | 446 | 76.0 | | |

Purge Stop Time: 15:47Total gallons purged: 2.0

Sample Information:

Sample Collection Time: 15:50Sample Collected Using: Teflon B.

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|------------------|------------------|--------------------|--------------------|--------------------|---|
| Sample Parameters | 602 | EDB | 610 | H170 | met | |
| Sample Containers | 2x 400ml dark | 2x 400ml Vial | 1x 1000ml glass | 2x 1000ml glass | 2x 1000ml glass | |
| pH of Preserved Samples | HCL | UN | UN | H2SO4 | HNO3 | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: None Color: None Turbidity: Modest
 Comments: _____

Field Instrument Information:

Instruments Used: Dran #260 pH; #150 Conductivity w/ digital displayCalibration: pH 4.0 _____ 7.0 _____ 10.0 _____ Conductivity: 4.0 Time/Date: 5/30/00Ambient Conditions: Wx: Partly Cloudy (S. wind)Field Personnel (name/title): Robert M. Mandy
Jan NewtSample delivered to laboratory by: Art Dorian



Well Sampling Log

Date: 5/31/00Time: 14:20Project Number: # 2339Site Location: Haystack, Fred Farm, Tract # 203Well I.D. 1.75 Depth of well (from TOC) 7.51 ftRelative to Mean Sea Level: Top of Casing (TOC) 7.51 ftWell Diameter 2 in. Well Construction 5 ft 0.010 in. slotted screenWell Volume 0.32 (0.4) gal Well Vol = 7.51 / $H \times$ / $I^2 \times 0.163 =$ 0.32 gal/volWell Type: upgradient downgradient hot spot other PropertyLongitude Latitude Purge Information: Purging eqpt: Peristaltic PumpPurge Start Time: 14:25Purge rate: 0.15 gal/min.Well Recharge Rate: slow to moderate

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|-------------|--------------|-------------|--------------|-------|
| 1 | 0.4 | | | | | |
| 2 | 0.8 | | | | | |
| 3 | 1.2 | | | | | |
| 4 | 1.6 | | | | | |
| 5 | 2.0 | | | | | |
| Field Parameters | | <u>7.43</u> | <u>488</u> | <u>25.9</u> | <u>14:45</u> | |

Purge Stop Time: 14:50Sample Information: Sample Collection Time: 14:40Total gallons purged: 2.0Sample Collected Using: Trickle Bottle

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|-----------------------|-----------------------|------------------------|------------------------|-----------------------|---|
| Sample Parameters | <u>601/602</u> | <u>806</u> | <u>244(2310)</u> | <u>El Pr</u> | <u>Pb</u> | |
| Sample Containers | <u>2x 400ml vials</u> | <u>2x 400ml vials</u> | <u>1x 1000ml glass</u> | <u>2x 1000ml glass</u> | <u>1x 2500ml poly</u> | |
| pH of Preserved Samples | <u>4.6</u> | <u>uv</u> | <u>uv</u> | <u>H2SO4</u> | <u>H2SO4</u> | |
| Additional Preservative | | | | | | |

Product noted: NoneOdor noted: NoneColor: GreyTurbidity: 4.5 (collected w/ purging)Comments: Field Instrument Information: Instruments Used: Ocean #260 pH; #130 Conductivity w/ ATC and Digital TempCalibration: pH 4.0 7.0 10.0Ambient Conditions: Conductivity: 1472 Time/Date: 5/31/00 14:15Field Personnel (name/title): Rubén M. Hernández / Environmental ScientistSample delivered to laboratory by: Paul Dela



Well Sampling Log

P-5

Date: 5/31/00 Time: 15:00 Project Number: ER1 #2339
 Site Location: Mayport Fuel Farm Tank # 203
 Well I.D. 1 1/4 in. Depth of well (from TOC) 7.2 ft Depth to water 5.52 ft
 Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft
 Well Diameter 2 in. Well Construction 5 ft 0.01 in. slotted screen Casing Material pvc
 Well Volume 0.25 gal Well Vol = $\frac{H}{H} \times \frac{1}{r^2} \times 0.163 = \frac{2.5}{1} \times 0.163 = 0.4075$ gal/vol
 $H = 7.12$ /TD = 5.52 /DTW = 1.60 ft
 Well Type: upgradient downgradient hot spot Regulatory other _____
 Longitude _____ Latitude _____
 Purge Information:
 Purging eqpt: Peristaltic Pump Purge rate: 0.1 gal/min.
 Purge Start Time: 15:02 Well Recharge Rate: Slow to moderate

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|------|--------------|------------|------|-------|
| 1 | 0.25 | | | | | |
| 2 | 0.5 | | | | | |
| 3 | 0.75 | | | | | |
| 4 | 1.0 | | | | | |
| 5 | 1.25 | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | 7.48 | 441 | 27.0 | 1524 | |

Purge Stop Time: 15:15 Total gallons purged: 1.5
 Sample Information:
 Sample Collection Time: 15:20 Sample Collected Using: IRL-2000

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|---------------|---------------|-----------------|-----------------|---------------|---|
| Sample Parameters | 601/602 | ED6 | 24(9310) | ELP1 | P6 | |
| Sample Containers | 2x 60ml vials | 2x 60ml vials | 1x 1000ml glass | 2x 1000ml glass | 1x 500ml poly | |
| pH of Preserved Samples | 4.6 | 4.6 | 4.6 | 4.504 | 4.605 | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: _____ Color: Green Turbidity: 11 (clearly visible)

Comments: _____

Field Instrument Information:

Instruments Used: Orion 4260 pH; #130 Conductivity w/ ATC and Digital Temp
 Calibration: pH 4.0 7.0 10.0 Conductivity: 447 Time/Date: 5/31/00 14:15

Ambient Conditions: _____

Field Personnel (name/title): Richard Mearns / Environmental Scientist

Sample delivered to laboratory by: Ann Delaney

K-6
esa

Well Sampling Log

Date: 5/31/00 Time: 15:40 Project Number: 7337
 Site Location: Mayport Fuel Farm Tank # 203
 Well I.D. 1.75" PC Depth of well (from TOC) 7.35 ft Depth to water 5.54 ft
 Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft
 Well Diameter 2 in. Well Construction 5 ft 0.00 in. slotted screen Casing Material pvc
 Well Volume 0.3 gal Well Vol = $1.81 / H \times 1 / r^2 \times 0.163 = 0.3$ gal/vol
 $H = 7.35$ / TD = 5.54 / DTW = 1.81 ft
 Well Type: _____ upgradient _____ downgradient _____ hot spot _____ other
 Longitude _____ Latitude _____
 Purge Information:
 Purging eqpt: Peristaltic Pump Purge rate: 0.15 gal/min.
 Purge Start Time: 1544 Well Recharge Rate: 5.00

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|--------|---------|----|--------------|------------|------|-------|
| 1 | 0.3 | | | | | |
| 2 | 0.6 | | | | | |
| 3 | 0.9 | | | | | |
| 4 | 1.2 | | | | | |
| 5 | 1.5 | | | | | |
| | | | | | | |
| | | | | | | |

Field Parameters 7.27 394 26.8 16.04
 Purge Stop Time: 1558 Total gallons purged: 2.0
 Sample Information:
 Sample Collection Time: 16:00 Sample Collected Using: Jet-A-Box

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|-----------------|-----------------|------------------|------------------|----------------|---|
| Sample Parameters | 601/602 | ED b | 24(2310) | EL 1/1 | Pb | |
| Sample Containers | 2x 400 ml vials | 2x 400 ml vials | 1x 1000 ml glass | 2x 1000 ml glass | 1x 500 ml poly | |
| pH of Preserved Samples | 4.0 | 4.0 | 4.0 | 4.504 | 4.005 | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: None Color: mostly clear Turbidity: low to mid dark
 Comments: (Greeny Grey 4/ Sample)
 Field Instrument Information:
 Instruments Used: Ocean #260 pH; #130 Conductivity w/ ATC and Digital Temp
 Calibration: pH 4.0 7.0 10.0 Conductivity: 2472 Time/Date: 5/31/00 14:15
 Ambient Conditions:
 Field Personnel (name/title): Rachael Mearns / Environmental Scientist

Sample delivered to laboratory by: [Signature]

esa

Well Sampling Log

Date: 5/31/00 Time: 16:15 Project Number: 2339
 Site Location: Mayport Fuel Farm Tank # 203
 Well I.D. 1 1/4" p2 Depth of well (from TOC) 7.20 ft Depth to water 5.76 ft
 Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft
 Well Diameter 2 in. Well Construction 5 ft 0.001 in. slotted screen Casing Material pvc
 Well Volume 0.25 gal Well Vol = $\frac{1.44}{H} \times \frac{1}{r^2} \times 0.163 = \frac{0.25}{\text{gal/vol}}$
 $H = \frac{7.20}{TD} - \frac{5.76}{DTW} = 1.44$ ft
 Well Type: _____ upgradient _____ downgradient _____ hot spot _____ other _____
 Longitude _____ Latitude _____

Purge Information:
 Purging eqpt: Peristaltic Pump Purge rate: 0.1 gal/min.
 Purge Start Time: 16:20 Well Recharge Rate: slow

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|------|--------------|------------|-------|-------|
| 1 | 0.25 | | | | | |
| 2 | 0.50 | | | | | |
| 3 | 0.75 | | | | | |
| 4 | 1.0 | | | | | |
| 5 | 1.25 | | | | | |
| Field Parameters | | 7.47 | 498 | 26.4 | 16:45 | |

Purge Stop Time: 16:35 Total gallons purged: 1.5

Sample Information:
 Sample Collection Time: 16:40 Sample Collected Using: TRACER Bottle

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|-----------------|-----------------|------------------|------------------|----------------|---|
| Sample Parameters | 601/602 | ED b | 244(3310) | Fl P15 | Pb | |
| Sample Containers | 2x 400 ml vials | 2x 400 ml vials | 1x 1000 ml glass | 2x 1000 ml glass | 1x 500 ml poly | |
| pH of Preserved Samples | 4cc | vw | vw | H2SO4 | HNO3 | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: None Color: Mostly clear Turbidity: moderate

Comments: _____

Field Instrument Information:

Instruments Used: Ocean 4260 pH; #130 Conductivity w/ ATC and Digital Temp

Calibration: pH 4.0 ✓ 7.0 ✓ 10.0 _____ Conductivity: ✓ Time/Date: 5/31/00 19:15

Ambient Conditions: _____

Field Personnel (name/title): Richard M. Mendenhall / Environmental Scientist

Sample delivered to laboratory by: Alan Delmar

41.0
esa

Date: 5/31/00 Time: 16:45 Project Number: 4 ERU 2339

Site Location: Mayport Fuel Farm Tank # 203

Well I.D. 1.00 in Depth of well (from TOC) 7.20 ft Depth to water 5.78 ft

Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft

Well Diameter 2 in Well Construction 5 ft 0.00 in slotted screen Casing Material pvc

Well Volume 0.3 gal Well Vol = $1.42/H \times 1/1^2 \times 0.163 = 0.3$ gal/vol

H = 7.20 / TD = 5.78 / DTW = 1.42 ft

Well Type: upgradient downgradient hot spot Recharge other _____

Longitude _____ Latitude _____

Purge Information:

Purging eqpt: Peristaltic Pump

Purge rate: 0.1 gal/min.

Purge Start Time: 1652

Well Recharge Rate: Slow

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|------|--------------|------------|-------|-------|
| 1 | 0.3 | | | | | |
| 2 | 0.6 | | | | | |
| 3 | 0.9 | | | | | |
| 4 | 1.2 | | | | | |
| 5 | 1.5 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | 1.48 | 488 | 26.6 | 17:19 | |

Purge Stop Time: 17:12

Total gallons purged: 2.0

Sample Information:

Sample Collection Time: 17:15

Sample Collected Using: Teledyne BTL

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|-----------------|-----------------|------------------|------------------|----------------|---|
| Sample Parameters | 601602 | ED6 | 24(2310) | ELP15 | Ph | |
| Sample Containers | 2x 400 ml vials | 2x 400 ml vials | 1x 1000 ml glass | 2x 1000 ml glass | 1x 500 ml poly | |
| pH of Preserved Samples | 4.6 | 4.6 | 4.6 | 4.504 | 4.605 | |
| Additional Preservative | | | | | | |

Product noted: No Odor noted: No Color: Grey (clear w/ purging) Turbidity: 4.1

Comments:

Field Instrument Information:

Instruments Used: Ocean 4260 pH; #130 Conductivity w/ ATC and Digital Temp

Calibration: pH 4.0 ✓ 7.0 ✓ 10.0 ✓ Conductivity: 1422 Time/Date: _____

Ambient Conditions:

Field Personnel (name/title): Rudolf W. Mendenhall / Environmental Scientist

Sample delivered to laboratory by: Hand Delivered



Well Sampling Log

Date: 6/1/00Time: 13:20Project Number: ERI #2379Site Location: Mayport Fuel Farm Tank #203Well I.D. TMW-9 Depth of well (from TOC) 7.67 ft Depth to water 5.29 ft

Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft

Well Diameter 2.0 in. Well Construction 5 ft 0.001 in. slotted screen Casing Material PVCWell Volume 0.9 gal Well Vol = $\frac{2.78}{H} \times 1 \text{ ft}^2 \times 0.163 = 0.4$ gal/volH = 7.67 /TD - 5.29 /DTW = 2.38 ft

Well Type: _____ upgradient _____ downgradient _____ hot spot _____ other

Longitude _____ Latitude _____

Purge Information:

Purging eqpt: Peristaltic PumpPurge rate: 0.1 gal/min.Purge Start Time: 13:27Well Recharge Rate: Moderate

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|-------------|--------------|-------------|--------------|-------|
| 1 | 0.4 | | | | | |
| 2 | 0.8 | | | | | |
| 3 | 1.2 | | | | | |
| 4 | 1.6 | | | | | |
| 5 | 2.0 | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | <u>7.23</u> | <u>566</u> | <u>27.1</u> | <u>13:50</u> | |

Purge Stop Time: 13:43Total gallons purged: 2.7

Sample Information:

Sample Collection Time: 13:45Sample Collected Using: Teddon Bailer

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|---------------------|---------------------|-----------------------|-----------------------|---------------------|---|
| Sample Parameters | <u>601/602</u> | <u>ED6</u> | <u>244(2310)</u> | <u>ELP1</u> | <u>P6</u> | |
| Sample Containers | <u>2x 4oz vials</u> | <u>2x 4oz vials</u> | <u>1x 1000L glass</u> | <u>2x 1000L glass</u> | <u>1x 500L poly</u> | |
| pH of Preserved Samples | <u>HCL</u> | <u>HN</u> | <u>HN</u> | <u>H2SO4</u> | <u>HNO3</u> | |
| Additional Preservative | | | | | | |

Product noted: none Odor noted: None Color: Grey, cloudy w/ precip Turbidity: H

Comments:

Field Instrument Information:

Instruments Used: Ocean 4260 pH; #130 Conductivity w/ ATC and Digital TempCalibration: pH 4.0 7.0 10.0 Conductivity: 7472 Time/Date: 6/1/00 12:18

Ambient Conditions:

Field Personnel (name/title): Rudner Mearns / Environmental ScientistSample delivered to laboratory by: Hand Delivered

1MW-10(South)



Well Sampling Log

Date: 6/11/00 Time: 13:05 Project Number: ER1 #2339
 Site Location: Mayport Fuel Farm Tank # 203
 Well I.D. 1MW-10 Depth of well (from TOC) 7.47 ft Depth to water 4.52 ft
 Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft
 Well Diameter 2 in. Well Construction 5 ft 0.001 in. slotted screen Casing Material pvc
 Well Volume 0.48 (0.5) gal Well Vol = $2.95 / H \times 1 / r^2 \times 0.163 = .48$ gal/vol
 $H = 2.97$ /TD - 4.52 /DTW = 2.95 ft
 Well Type: upgradient downgradient hot spot Impervious other _____
 Longitude _____ Latitude _____
 Purge Information:
 Purging eqpt: Peristaltic Pump Purge rate: 0.15 gal/min.
 Purge Start Time: 13:08 Well Recharge Rate: moderate

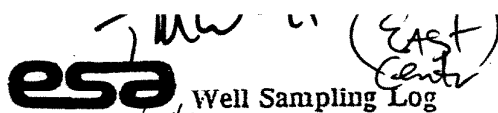
| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|-------------|--------------|-------------|-------------|-------|
| 1 | 0.5 | | | | | |
| 2 | 1.0 | | | | | |
| 3 | 1.5 | | | | | |
| 4 | 2.0 | | | | | |
| 5 | 2.5 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | <u>7.43</u> | <u>518</u> | <u>27.1</u> | <u>1434</u> | |

Purge Stop Time: 14:26 Total gallons purged: 2.7
 Sample Information:
 Sample Collection Time: 14:30 Sample Collected Using: Jetted Sample

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|-----------------------|-----------------------|------------------------|------------------------|----------------------|---|
| Sample Parameters | <u>601/602</u> | <u>ED6</u> | <u>RAH(2310)</u> | <u>FL11</u> | <u>P6</u> | |
| Sample Containers | <u>2x 400ml vials</u> | <u>2x 400ml vials</u> | <u>1x 1000ml glass</u> | <u>2x 1000ml glass</u> | <u>1x 500ml poly</u> | |
| pH of Preserved Samples | <u>4.6</u> | <u>4.4</u> | <u>4.4</u> | <u>4.504</u> | <u>4.403</u> | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: _____ Color: Grey, Cloudy w/ purple Turbidity: _____
 Comments: _____
 Field Instrument Information:
 Instruments Used: Ocean 4260 pH; #130 Conductivity w/ ATC and Digital Temp
 Calibration: pH 4.0 7.0 10.0 Conductivity: 447 Time/Date: 6/11/00 12:18
 Ambient Conditions: _____
 Field Personnel (name/title): Richard Mearns / Environmental Scientist

Sample delivered to laboratory by: Frank Deluca



Well Sampling Log

Date: 6/1/00 Time: 14:40 Project Number: ERL#2339Site Location: Mayport Fuel Farm Tank #203Well I.D. 5 MW-1 Depth of well (from TOC) 7.11 ft Depth to water 4.91 ft

Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft

Well Diameter 2 in. Well Construction 5 ft 0.010 in. slotted screen Casing Material PVCWell Volume ↑ 0.4 gal Well Vol = $\frac{1}{H} \times \frac{1}{r^2} \times 0.163 =$ 0.36 gal/volH = 7.11 /TD - 4.91 /DTW = _____ ftWell Type: _____ upgradient _____ downgradient _____ hot spot _____ Regulatory other

Longitude _____ Latitude _____

Purge Information:

Purging eqpt: Peristaltic PumpPurge rate: 0.15 gal/min.Purge Start Time: 14:47Well Recharge Rate: Slow to moderate

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|-------------|--------------|-------------|------|-------|
| 1 | 0.4 | | | | | |
| 2 | 0.8 | | | | | |
| 3 | 1.2 | | | | | |
| 4 | 1.6 | | | | | |
| 5 | 2.0 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | <u>7.41</u> | <u>557</u> | <u>22.8</u> | | |

Purge Stop Time: 15:02Total gallons purged: 2.25

Sample Information:

Sample Collection Time: 15:05Sample Collected Using: Jet-Low Sampler

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|----------------------|----------------------|------------------------|------------------------|----------------------|---|
| Sample Parameters | <u>601/602</u> | <u>606</u> | <u>614(2310)</u> | <u>611/11</u> | <u>616</u> | |
| Sample Containers | <u>2x 60ml vials</u> | <u>2x 60ml vials</u> | <u>1x 1000ml glass</u> | <u>2x 1000ml glass</u> | <u>1x 500ml poly</u> | |
| pH of Preserved Samples | <u>4.6</u> | <u>4.6</u> | <u>4.6</u> | <u>4.504</u> | <u>4.605</u> | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: None Color: Grey, Green Turbidity: 4

Comments:

Field Instrument Information:

Instruments Used: Ocean 4260 pH; #130 Conductivity, w/ ATC and Digital TempCalibration: pH 4.0 7.0 10.0 Conductivity: 1472 Time/Date: 6/1/00 12:18Ambient Conditions: Warm (85°C) Sunny, Clear w/ 5710 NEField Personnel (name/title): Rubens M. Mendez / Environmental ScientistSample delivered to laboratory by: Amal Datta

TMW-12 (west)
Cen

Well Sampling Log

Date: 6/1/00 Time: 15:15 Project Number: ERI # 2379
 Site Location: Manor
 Well I.D. TMW-12 Depth of well (from TOC) 7.40 ft Depth to water 4.49 ft
 Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft
 Well Diameter 2 in. Well Construction 5 ft 10 in. slotted screen Casing Material PVC
 Well Volume 2.5 gal Well Vol = $\frac{7.40}{H} \times \frac{1}{1^2} \times 0.163 = \frac{0.49}{H}$ gal/vol
 $H = \frac{7.40}{TD - 4.49} / DTW = 2.99$ ft
 Well Type: _____ upgradient _____ downgradient _____ hot spot _____ other
 Longitude _____ Latitude _____

Purge Information:
 Purging eqpt: Per Albrity Purge rate: 0.15 gal/min.
 Purge Start Time: 15:12 Well Recharge Rate: None

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|---------|-------------|--------------|-------------|-------------|-------|
| 1 | 0.5 | | | | | |
| 2 | 1.0 | | | | | |
| 3 | 1.5 | | | | | |
| 4 | 2.0 | | | | | |
| 5 | 2.5 | | | | | |
| Field Parameters | | <u>7.46</u> | <u>561</u> | <u>29.0</u> | <u>1550</u> | |

Purge Stop Time: 15:42 Total gallons purged: 2.6
 Sample Information:
 Sample Collection Time: 15:45 Sample Collected Using: Tech Baker

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|------------------------|------------------------|------------------------|------------------------|-----------------------|---|
| Sample Parameters | <u>601/602</u> | <u>ED6</u> | <u>B310</u> | <u>FI Pro</u> | <u>Leam</u> | |
| Sample Containers | <u>2x1000 ml glass</u> | <u>2x1000 ml glass</u> | <u>1x1000 ml glass</u> | <u>2x1000 ml glass</u> | <u>1x500 ml glass</u> | |
| pH of Preserved Samples | <u>HCl</u> | <u>UN</u> | <u>UN</u> | <u>H2SO4</u> | <u>H2SO4</u> | |
| Additional Preservative | | | | | | |

Product noted: None Odor noted: None Color: Gray (change of purging) Turbidity: H₂
 Comments: _____

Field Instrument Information:
 Instruments Used: Oriel #700 pH, #130 Conductivity w/ ATC 7 Day Al Tray
 Calibration: pH 4.0 7.0 10.0 Conductivity: 477 Time/Date: 6/1/00 12:18
 Ambient Conditions: WARM (85°F) sunny, clear Wind S-NE
 Field Personnel (name/title): Rick Mundy Environmental Scientist

Sample delivered to laboratory by: Handwritten

esa

Center

Well Sampling Log

Date: 6/1/00 Time: 1555 Project Number: Ed # 2339
 Site Location: Augusta State Park
 Well I.D. TMU-113 Depth of well (from TOC) 7.40 ft Depth to water 4.9 ft
 Relative to Mean Sea Level: Top of Casing (TOC) _____ ft Static Water Level _____ ft
 Well Diameter 2 in. Well Construction 5 ft. 2.00 in. slotted screen Casing Material pc
 Well Volume 0.4 gal Well Vol = $\frac{\pi}{4} \times \frac{H}{12} \times \frac{1}{12} \times 0.163 = 0.29$ gal/vol
 $H = 7.40$ /TD = 4.9 /DTW = 2.5 ft
 Well Type: upgradient downgradient hot spot other

Longitude _____ Latitude _____

Purge Information:

Purging eqpt: Peristaltic Pump

Purge rate: 0.15 gal/min

Purge Start Time: 16:00

Well Recharge Rate: None

| Volume | Gallons | pH | Conductivity | Temp. (°C) | Time | Other |
|------------------|------------|-------------|--------------|-------------|------|-------|
| 1 | <u>0.4</u> | | | | | |
| 2 | <u>0.8</u> | | | | | |
| 3 | <u>1.2</u> | | | | | |
| 4 | <u>1.6</u> | | | | | |
| 5 | <u>2.0</u> | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Field Parameters | | <u>7.48</u> | <u>553</u> | <u>26.4</u> | | |

Purge Stop Time: 16:15

Total gallons purged: 2.2

Sample Information:

Sample Collection Time: 16:20

Sample Collected Using: Teller Bink

| Order of Sampling | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------|--------------------|--------------------|----------------------|----------------------|----------------|---|
| Sample Parameters | <u>601/693</u> | <u>8310</u> | <u>8310</u> | <u>4 Pro</u> | <u>P6</u> | |
| Sample Containers | <u>2x4oz vials</u> | <u>2x4oz vials</u> | <u>1x100ml glass</u> | <u>2x100ml glass</u> | <u>1x500ml</u> | |
| pH of Preserved Samples | <u>4.0</u> | <u>7.0</u> | <u>7.0</u> | <u>4.0</u> | <u>4.0</u> | |
| Additional Preservative | | | | <u>H2SO4</u> | <u>HNO3</u> | |

Product noted: None Odor noted: none Color: very clear Turbidity: medium

Comments:

Field Instrument Information:

Instruments Used: Oriel #260 pH; #130 conductivity w/rtc + Digital Temp

Calibration: pH 4.0 7.0 10.0 Conductivity: 4.7 Time/Date: 6/1/00 12:18

Ambient Conditions: Warm (85°F) Sunny, clear, Wind 5-10 NE

Field Personnel (name/title): John Nason - Assistant Scientist

John Nason - Assistant Scientist

Sample delivered to laboratory by: John Nason

**LIMITED TANK CLOSURE REPORT
ABOVEGROUND STORAGE TANK NO. 204
RELIABLE MECHANICAL JOB
MAYPORT NAVAL STATION
MAYPORT, FLORIDA**



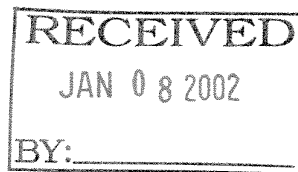
**LIMITED TANK CLOSURE REPORT
ABOVEGROUND STORAGE TANK NO. 204
RELIABLE MECHANICAL JOB
MAYPORT NAVAL STATION
MAYPORT, FLORIDA**

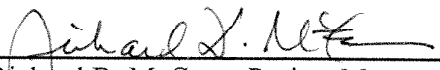
PREPARED FOR:

Environmental Recovery Group, Inc.
251 Levy Road
Atlantic Beach, Florida 32233-0569
ERG Job Number 3369

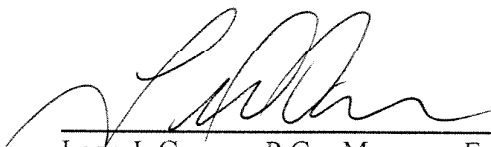
PREPARED BY:

Aerostar Environmental Services, Inc.
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(904) 565-2820




Richard D. McCann, Project Manager

10/16/01
Date


Leon J. Carrero, P.G.; Manager, Environmental Services

10/16/01
Date

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1.0 INTRODUCTION

Aerostar Environmental Services, Inc. (AEROSTAR) provided environmental services during closure of an aboveground storage tank (AST) system (hereafter referred to as Tank #204), located at the Mayport Naval Station, Mayport, Duval County, Florida, Florida Department of Environmental Protection (FDEP) facility ID #168626008; hereafter referred to as the site. According to Navy records, the AST was used to store diesel fuel. A topographic map showing the location of the site is included as Figure 1. Demolition and AST closure activities were conducted by Realco Wrecking and Recycling under the management of Reliable Mechanical, Inc. (RMI) of Louisville, Kentucky. Environmental assessment activities were conducted by AEROSTAR personnel in accordance with the guidelines established in the Storage Tank System Closure Assessment Requirements and following closure specifications provided by RMI. Based on the results of this investigation, further assessment is recommended for the area of the former AST system. The following sections present the AST system location and description, closure procedures and results of the environmental monitoring activities.

2.0 STORAGE TANK REMOVAL PROCEDURES

The former AST system was located approximately 350 feet south of the St. Johns River on the Mayport Naval Station, and consisted of a 1.5 million gallon steel tank containing diesel fuel. The AST was constructed of welded steel sheets and placed on a one-foot thick round concrete pad, approximately 100 feet in diameter. Information obtained by AEROSTAR from the Navy indicated that the AST was installed in 1964. A site plan showing the location of the former AST system is included as Figure 2.

The AST system was removed between August 14 and August 15, 2001 by Realco Recycling and Wrecking Company, a subcontractor to RMI. Prior to demolition, the remaining contents of Tank #204 were transferred to another tank located at the site. The interior of the tank was cleaned by Environmental Recovery Group, Inc. (ERG). The rinse water was transported by ERG to Waste Recovery, Incorporated (WRI) in Jacksonville, Florida for proper disposal. The steel roof and walls of the tank were demolished and properly disposed of, leaving only the steel tank bottom (approximately 0.5-inches thick) and the one-foot thick concrete pad. Copies of the Limited Closure

Summary Report and the Storage Tank Facility Registration Form are included in Appendices A and B, respectively. Photographic documentation of the site conditions during soil and groundwater sampling activities is included in Appendix C.

3.0 ENVIRONMENTAL MONITORING ACTIVITIES

On August 16 and August 17, 2001, soil borings PB-1 through PB-8 were advanced around the perimeter of the former AST. On August 17, 2001, additional soil borings TB-1 through TB-5 were advanced through the concrete pad to further evaluate soil quality. Soil samples were collected during boring advancement at one-foot intervals from approximately one foot below land surface (BLS) to approximately four feet BLS using a three-inch diameter, stainless steel hand auger. The soil samples from the perimeter borings PB-1 through PB-8 were screened with a calibrated portable Heath Tech Porta-FID IIITM Organic Vapor Analyzer with a Flame Ionization Detector (OVA-FID). Each sample was also screened with a charcoal filter to differentiate the instrument's response to naturally occurring methane vapors. The difference between the readings is the vapor concentration attributed to petroleum hydrocarbons. In addition to the OVA-FID screening, each sample was inspected for signs of hydrocarbon staining and unusual odors. All soil samples collected from the tank bottom borings TB-1 through TB-5 were saturated and therefore were not field screened for organic vapors. Soil sample collection and screening activities were conducted in accordance with AEROSTAR's FDEP-approved Comprehensive Quality Assurance Project Plan (ComQAPP) #940023G.

Hydrocarbon vapors were detected above the State target level of 10 parts per million (ppm), established as a "positive field screening result" in Chapter 62-770, Florida Administrative Code (FAC). Maximum vapor concentrations detected in soil samples collected from the vadose zone ranged from 12 ppm to 1660 ppm. Results of the soil vapor screening are included in Table 1. The soil sample locations are shown in Figure 2.

Soil samples exhibiting the highest OVA responses from each borehole were collected for laboratory analyses. A soil sample was collected for laboratory analyses from each boring location with no "positive field screening result." The sample was collected approximately one foot above the static

water table. The samples were submitted to Environmental Conservation Laboratories, Inc. (Enco) in Jacksonville, Florida for analyses of the parameters listed in EPA Method 8260 for Volatile Organic Aromatics (VOAs), EPA Method 8310 for Polynuclear Aromatic Hydrocarbons (PAHs), and Total Recoverable Petroleum Hydrocarbons (TRPHs) by the FL-PRO Method. Soil sampling activities were conducted in accordance with AEROSTAR's FDEP-approved ComQAPP #940023G.

Results of the soil laboratory analyses indicated TRPH concentrations above State Cleanup Target Levels (SCTLs) in soil samples collected from the area of the former AST. Soil analytical results are summarized in Table 2. The laboratory analytical reports are included in Appendix D.

On August 16 and August 17, 2001, thirteen temporary wells (PB-1 through PB-8 and TB-1 through TB-5) were installed at the locations of the soil borings, as shown in Figure 2. The temporary wells were installed approximately eight feet BLS using a three-inch diameter, stainless steel hand auger. The water table surface was encountered at approximately 4.5 feet BLS during the assessment activities. The temporary well construction details are summarized in Table 3.

Groundwater samples were collected from the temporary wells for analyses of the parameters listed in EPA Method 601 for Volatile Organic Hydrocarbons (VOHs), EPA Method 602 for VOAs, EPA Method 610 for PAHs, EPA Method 504 for Ethylene Dibromide, TRPH by the FL-PRO Method, and EPA Method 200.7 for Total Lead by the quiescent sampling method using an adjustable-flow peristaltic pump to minimize sample turbidity. The remaining samples were collected using disposable bailers after purging each well of five well volumes to ensure representative samples of actual aquifer conditions. Groundwater sampling activities were conducted in accordance with AEROSTAR's FDEP-approved ComQAPP #940023G.

Results of the groundwater analyses showed hydrocarbons concentrations above SCTLs in the samples collected in the area of the AST. Groundwater analytical results with corresponding State target levels are summarized in Table 4. Laboratory analytical reports are included in Appendix D.

4.0 RECOMMENDATIONS

Hydrocarbon concentrations were detected above the State target levels established in Chapter 62-777, FAC, in the groundwater and soil samples collected for this investigation. Based on the results of the tank closure, further assessment activities are recommended for the area of the former AST.

TABLES

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Mayport AST Closure /Tank #204

Facility ID No: 168626008

| SAMPLE | | | | OVA SCREENING RESULTS | | | |
|------------|----------------|----------------|------------------------|-----------------------|-----------------------|-------------------|--|
| BORING NO. | DATE COLLECTED | DEPTH TO WATER | SAMPLE INTERVAL (FBLs) | TOTAL READING (ppm) | CARBON FILTERED (ppm) | NET READING (ppm) | COMMENTS |
| TB-1 | 8/17/01 | ~0.5 | 1 | NS | NS | NS | TB-1 = Tank Bottom Sampling Location 1 |
| | | | 2 | NS | NS | NS | |
| | | | 3 | NS | NS | NS | |
| TB-2 | 8/17/01 | ~0.5 | 1 | NS | NS | NS | Concrete Bottom ~16-in. Thick |
| | | | 2 | NS | NS | NS | |
| | | | 3 | NS | NS | NS | |
| TB-3 | 8/17/01 | ~0.5 | 1 | NS | NS | NS | Concrete Bottom ~16-in. Thick |
| | | | 2 | NS | NS | NS | |
| | | | 3 | NS | NS | NS | |
| TB-4 | 8/17/01 | ~0.5 | 1 | NS | NS | NS | Concrete Bottom ~16-in. Thick |
| | | | 2 | NS | NS | NS | |
| | | | 3 | NS | NS | NS | |
| TB-5 | 8/17/01 | ~0.5 | 1 | NS | NS | NS | Concrete Bottom ~16-in. Thick |
| | | | 2 | NS | NS | NS | |
| | | | 3 | NS | NS | NS | |
| PB-1 | 8/16/01 | ~4.5 | 1 | 3 | 0 | 3 | PB-1 = Perimeter Boring 1 |
| | | | 2 | 12 | 0 | 12 | |
| | | | 3 | 0 | 0 | 0 | |
| | | | 4 | 0 | 0 | 0 | |
| PB-2 | 8/16/01 | ~4.5 | 1 | 0 | 0 | 0 | |
| | | | 2 | 0 | 0 | 0 | |
| | | | 3 | 0 | 0 | 0 | |
| | | | 4 | 0 | 0 | 0 | |
| PB-3 | 8/16/01 | ~4.5 | 1 | 0 | 0 | 0 | |
| | | | 2 | 0 | 0 | 0 | |
| | | | 3 | 0 | 0 | 0 | |
| | | | 4 | 0 | 0 | 0 | |
| PB-4 | 8/16/01 | ~4.5 | 1 | 0 | 0 | 0 | |
| | | | 2 | 0 | 0 | 0 | |
| | | | 3 | 0 | 0 | 0 | |
| | | | 4 | 2000 | 340 | 1660 | |
| PB-5 | 8/16/01 | ~4.0 | 1 | 0 | 0 | 0 | |
| | | | 2 | 0 | 0 | 0 | |
| | | | 3 | 0 | 0 | 0 | |
| PB-6 | 8/17/01 | ~4.0 | 1 | 0 | 0 | 0 | |
| | | | 2 | 0 | 0 | 0 | |
| | | | 3 | 0 | 0 | 0 | |
| PB-7 | 8/17/01 | ~3.0 | 1 | 0 | 0 | 0 | |
| | | | 2 | 0 | 0 | 0 | |
| | | | 3 | 0 | 0 | 0 | |
| PB-8 | 8/17/01 | ~3.0 | 1 | 0 | 0 | 0 | |
| | | | 2 | 0 | 0 | 0 | |
| | | | 3 | 0 | 0 | 0 | |

NS = Not Screened-All samples were saturated

TABLE 2: SOIL ANALYTICAL SUMMARY

Facility Name: Mayport Tank Closure/Tank #204

Facility ID Number: 168626008

| Sample | | | | OVA | | | | | | | | | |
|------------------------------------|----------------|---------------------|-----------------------|-------------------------|-----------------|-----------------|----------------------|-----------------------|--------------|---------------------|-----------------------------|-----------------------------|--------------|
| Sample ID | Date Collected | Depth to Water (ft) | Sample Interval (lbs) | Net OVA Reading (mg/kg) | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Total Xylenes (mg/kg) | MTBE (mg/kg) | Naphthalene (mg/kg) | 1-Methylnaphthalene (mg/kg) | 2-Methylnaphthalene (mg/kg) | TRPH (mg/kg) |
| Residential Direct Exposure Limits | | | | | | | | | | | | | |
| Commercial Direct Exposure Limits | | | | | | | | | | | | | |
| Leachability Groundwater Limits | | | | | | | | | | | | | |
| TB-1 | 8/17/01 | ~0.5 | 3 | NS | <0.0011 | <0.0011 | <0.0011 | 0.001 | <0.0011 | <0.020 | <0.040 | <0.040 | <8.0 |
| TB-2 | 8/17/01 | ~0.5 | 2.5 | NS | <0.001 | 0.0015 | <0.001 | 0.0022 | <0.001 | <0.021 | <0.041 | <0.041 | <8.2 |
| TB-3 | 8/17/01 | ~0.5 | 3.5 | NS | <0.0012 | 0.002 | <0.001 | 0.0018 | <0.001 | <0.020 | <0.040 | <0.040 | <8.0 |
| TB-4 | 8/17/01 | ~0.5 | 3 | NS | <0.0012 | 0.0056 | 0.0021 | 0.0129 | <0.001 | <0.020 | <0.041 | <0.041 | <8.1 |
| TB-5 | 8/17/01 | ~0.5 | 2.5 | NS | <0.0012 | <0.001 | <0.001 | 0.001 | <0.001 | <0.020 | <0.041 | <0.041 | <8.1 |
| PB-1 | 8/16/01 | ~4.5 | 2 | 12 | <0.0013 | <0.0013 | <0.0013 | <0.0037 | <0.0013 | <0.019 | <0.038 | <0.038 | <7.6 |
| PB-2 | 8/16/01 | ~4.5 | 4 | 0 | <0.0015 | <0.0015 | <0.0015 | <0.0046 | <0.0015 | <0.022 | <0.044 | <0.044 | <8.8 |
| PB-3 | 8/16/01 | ~4.5 | 4 | 0 | <0.0014 | <0.0014 | <0.0014 | <0.0042 | <0.0014 | <0.021 | <0.042 | <0.042 | 350 |
| PB-4 | 8/16/01 | ~4.5 | 4 | 1660 | <0.13 | <0.13 | <0.13 | <0.39 | <0.13 | <0.21 | <0.43 | <0.43 | 5200 |
| PB-5 | 8/16/01 | ~4.0 | 3 | 0 | <0.0014 | <0.0014 | <0.0014 | <0.0041 | <0.0014 | <0.021 | <0.042 | <0.042 | 14 |
| PB-6 | 8/17/01 | ~4.0 | 3 | 0 | <0.0013 | <0.0013 | <0.0013 | 0.0014 | <0.0013 | <0.020 | <0.039 | <0.039 | <7.8 |
| PB-7 | 8/17/01 | ~3.0 | 2 | 0 | <0.002 | <0.002 | <0.002 | 0.0017 | <0.002 | <0.025 | <0.051 | <0.051 | <10 |
| PB-8 | 8/17/01 | ~3.0 | 2 | 0 | <0.001 | <0.001 | <0.001 | 0.0012 | <0.001 | <0.018 | <0.036 | <0.036 | <7.2 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

NS = Not Screened-All samples were saturated

Facility ID Number: 168626008

NS = Not Screened. All samples were saturated

Facility Name: Mayport Tank Closure/Tank #204

| WELL | DATE | INSTALLATION | T |
|------|------|--------------|---|
|------|------|--------------|---|

[illegible]

TABLE 4: GROUNDWATER LABORATORY ANALYTICAL SUMMARY

Facility Name: Mayport Tank Closure/Tank #204

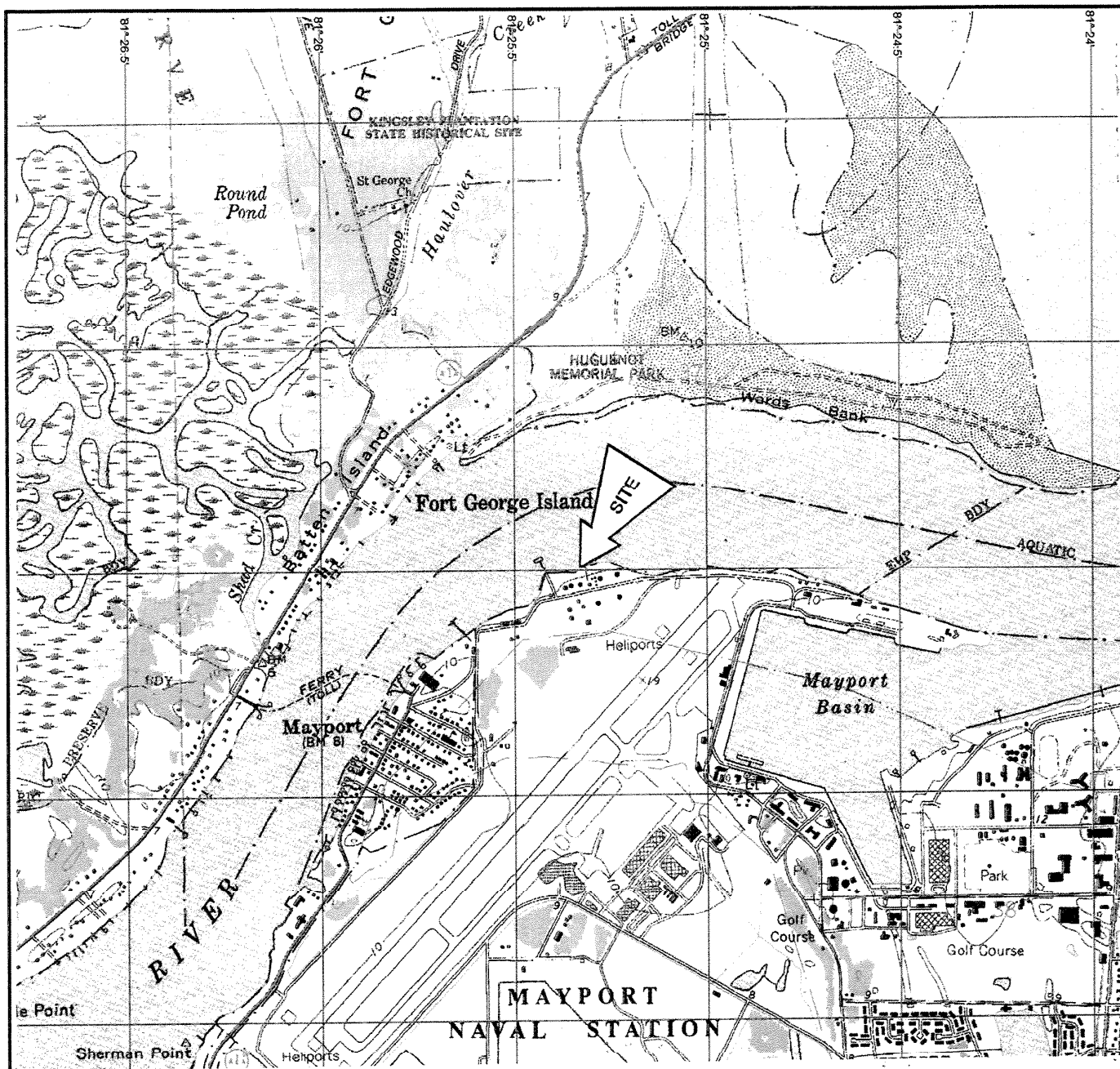
Facility ID No: 168626008

Not Analyzed = NA

All results in micrograms per liter (ug/L)

| Sample Location | Date | Benzene | Toluene | Ethylbenzene | Total Xylenes | MTBE | Naphthalene | 1-Methylnaphthalene | 2-Methylnaphthalene | Chloromethane | Acenaphthene | Fluorene | Fluoranthene | Pyrene | Benzo(a)anthracene | Chrysene | Lead | EDB | TRPH |
|-----------------|----------|---------|---------|--------------|---------------|------|-------------|---------------------|---------------------|---------------|--------------|----------|--------------|--------|--------------------|----------|------|--------|-------|
| | | 1 | 40 | 30 | 20 | 50 | 20 | 20 | 20 | 2.7 | 20 | 280 | 280 | 210 | 0.2 | 4.8 | 15 | 0.02 | 5000 |
| TB-1 | 08/17/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | 3.1 | 3.9 | 3.8 | <1.0 | <0.50 | <0.10 | 0.94 | 1.1 | <0.10 | <0.10 | <5.0 | <0.020 | 1.2 |
| TB-2 | 08/17/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | 1.2 | <1.0 | <1.0 | <1.0 | <0.50 | 1.2 | 1.7 | 1.6 | <0.10 | <0.10 | <5.0 | <0.020 | 0.87 |
| TB-3 | 08/17/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <0.50 | <1.0 | <1.0 | <1.0 | <0.50 | <0.10 | 2.5 | 2.7 | 0.64 | 0.76 | <5.0 | <0.020 | 1.1 |
| TB-4 | 08/17/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <0.50 | <1.0 | <1.0 | 3.8 | <0.50 | <0.10 | 2.4 | 2.3 | 0.30 | 0.33 | 6.0 | <0.020 | 1.2 |
| TB-5 | 08/17/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <0.50 | <1.0 | <1.0 | 6.1 | <0.50 | <0.10 | 2.1 | 1.9 | 0.26 | 0.28 | 8.0 | <0.020 | 0.91 |
| PB-1 | 08/16/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <0.50 | <1.0 | <1.0 | 4.7 | <0.50 | <0.10 | 0.95 | 0.69 | <0.10 | <0.10 | <5.0 | <0.020 | 0.69 |
| PB-2 | 08/16/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <0.50 | <1.0 | <1.0 | <1.0 | <0.50 | <0.10 | 0.14 | 0.35 | <0.10 | <0.10 | <5.0 | <0.020 | <0.20 |
| PB-3 | 08/16/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <0.50 | <1.0 | <1.0 | <1.0 | <0.50 | <0.10 | 0.17 | 0.57 | <0.10 | <0.10 | <5.0 | <0.020 | 0.28 |
| PB-4 | 08/16/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <0.50 | <1.0 | <1.0 | <1.0 | <0.50 | <0.10 | 0.46 | 1.1 | <0.10 | <0.10 | <5.0 | <0.020 | 7.7 |
| PB-5 | 08/16/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <0.50 | <1.0 | <1.0 | <1.0 | <0.50 | <0.10 | <0.10 | 0.21 | <0.10 | <0.10 | <5.0 | <0.020 | <0.20 |
| PB-6 | 08/17/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <0.50 | <1.0 | <1.0 | <1.0 | <0.50 | <0.10 | <0.10 | 0.26 | <0.10 | <0.10 | <5.0 | <0.020 | <0.20 |
| PB-7 | 08/17/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <0.50 | <1.0 | <1.0 | <1.0 | 0.51 | <0.10 | 0.83 | 1.3 | <0.10 | <0.10 | <5.0 | <0.020 | 3.3 |
| PB-8 | 08/17/01 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <0.50 | <1.0 | <1.0 | <1.0 | <0.50 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <5.0 | <0.020 | <0.20 |

FIGURES



MAYPORT QUADRANGLE

30081-B5-TF-024

PHOTOREVISED 1982

DMA 4744 IV NW-SERIES V847

7.5 MINUTE SERIES
(TOPOGRAPHIC)

CONTOUR INTERVAL 10 FEET



NATIONAL GEODETIC VERTICAL DATUM OF 1929

FIGURE 1 TOPOGRAPHIC SITE LOCATION MAP

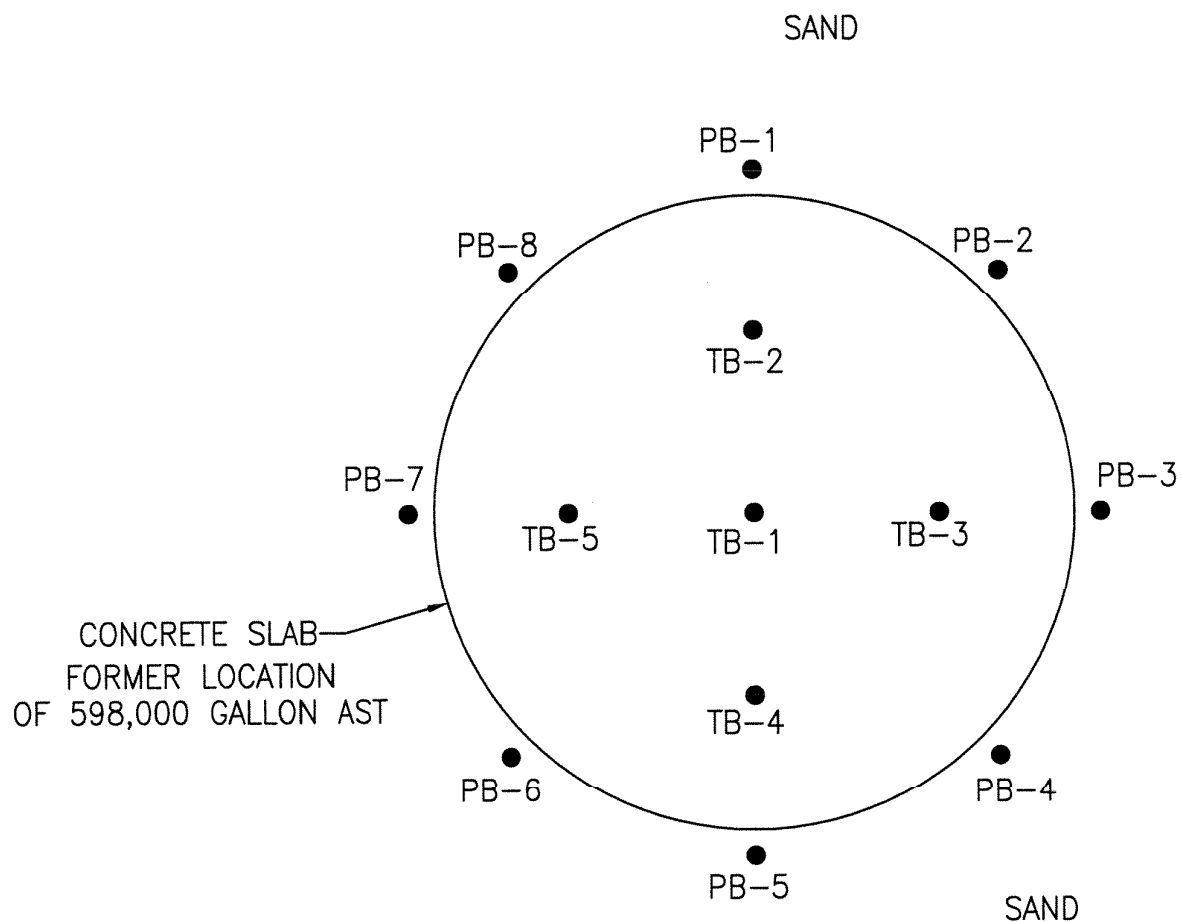


MAYPORT TANK CLOSURE/TANK #204
MAYPORT NAVAL STATION

DRAWN BY: JJR

REFERENCE: MAP OF
MAYPORT, FLORIDA
PREPARED BY: U. S.
GEOLOGICAL SURVEY

ST. JOHNS RIVER

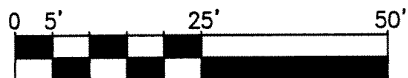


LEGEND

- PERIMETER BORING LOCATION
PB-5
- TANK BOTTOM BORING LOCATION
TB-1

GRAPHIC SCALE

1" = 25'



JOB #01-150-06

FIGURE 2. SITE PLAN & SAMPLING LOCATIONS



MAYPORT AST CLOSURE/TANK #204
MAYPORT NAVAL AIR STATION
JACKSONVILLE, FLORIDA

DRAWN BY: KJS

DATE: 10/8/01

APPENDIX A
LIMITED CLOSURE SUMMARY REPORT



Department of Environmental Protection

1 Towers Office Building ♦ 2600 Blair Stone Road ♦ Tallahassee, Florida 32399-2400

DEP Form 62-761.900(8)
Form Title: Limited Closure
Summary Report:
Effective Date: July 13, 1998

Limited Closure Summary Report

This form is required for facilities that have sites with documented contamination requiring a site assessment in accordance with Chapter 62-770, F.A.C. This includes those facilities that are eligible for the Early Detection Incentive Program (EDI), the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP), and the Petroleum Cleanup Participation Program (PCPP), pursuant to Sections 376.3071 and 376.3072, F.S. Documentation of procedures followed, and results obtained during closure shall be reported in this form, along with any attachments. This form shall be submitted to the County within 60 days of completion of the closure in accordance with Section A of the "Storage Tank System Closure Assessment Requirements."

Complete All Applicable Blanks. Please Print or Type

General Information

| | | |
|--|---|-----------------------------------|
| Date: 08/17/01 | FDEP Facility ID Number: <u>168626008</u> | County: <u>DUVAL</u> |
| Facility Name <u>MAYPORT NAVAL STATION</u> | | Facility Telephone #: () _____ |
| Facility Address: _____ | | |
| Owner or Operator Name: _____ | | Owner/Operator phone #: () _____ |
| Mailing Address: _____ | | |

Storage Tank System Closure Information

1. Were the storage tanks(s): (Check one or both)

| | |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Aboveground | <input type="checkbox"/> Underground |
|---|--------------------------------------|

2. General System Information

| | | |
|--|---------------------------------|----------------------------------|
| Types of Products Stored: <u>Diesel Fuel</u> | Number of Tanks: <u>ONE (1)</u> | Age(s) of Tanks: <u>~40</u> yrs. |
|--|---------------------------------|----------------------------------|

3. Was the Limited Closure Summary Report Performed as a Result of: (check one or more)

| | | |
|---|--|--|
| <input checked="" type="checkbox"/> Tank Systems Removal? | <input type="checkbox"/> Spill Containment Installation? | <input type="checkbox"/> Change in Storage to a Non-Regulated Substance? |
| <input type="checkbox"/> Tank Systems Closed in Place? | <input type="checkbox"/> Dispenser Liners Installation? | <input type="checkbox"/> Release Prevention Barrier Installation? |
| <input type="checkbox"/> Piping Sump Installation? | <input type="checkbox"/> Secondary Containment Installation? | <input type="checkbox"/> Other? (please explain) _____ |

4. Please Check Yes or No to the following:

| | | |
|---|---|--|
| a. Was there previously reported contamination discovered on site? If yes, was | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| 1. A Discharge Report Form submitted to the County? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. An investigation performed in accordance with Rule 62-761.820, F.A.C.? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Is the depth to groundwater less than 20 feet? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Are there monitoring wells on site? If yes, were they | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| 1. Groundwater monitoring wells? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. Vapor monitoring wells? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. Used for closure assessment sampling? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. Properly closed? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 5. Retained for site assessment purposes? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. If tanks were replaced, were contaminated soils returned to the tank excavation? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

Signature of owner or operator

Richard D. McCann
Signature of person performing
Limited Closure Assessment

Richard D. McCann
Name of person performing
Limited Closure Assessment

(date) _____

(date) 8/17/01

Affiliation Aerostar Env. Svcs, Inc.

Printed on recycled paper.

APPENDIX B
STORAGE TANK FACILITY REGISTRATION FORM



Florida Department of Environmental Protection
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Storage Tank Facility Registration Form

| |
|--|
| DEP Form # 62-761.900(2) |
| Form Title <u>Storage Tank Registration Form</u> |
| Effective Date: <u>July 13, 1998</u> |
| DEP Application No. _____ (Filled in by DEP) |

Submit a completed form for the facility when registration of storage tanks or compression vessels is required by Chapter 376.303, Florida Statutes

Please review Registration Instructions before completing the form.

| | | | |
|-----------------------------|--|---|---|
| Please check all that apply | <input type="checkbox"/> New Registration | <input type="checkbox"/> New Owner | <input type="checkbox"/> New Tanks |
| | <input type="checkbox"/> Facility Info Update/Correction | <input type="checkbox"/> Owner Info Update/Correction | <input checked="" type="checkbox"/> Tank Info Update/Correction |

A. FACILITY INFORMATION

County: **DUVAL**

DEP Facility ID: **168626008**

Facility Name: MAYPORT NAVAL STATION

Facility Address: _____ City: Jacksonville Zip: _____

Facility Contact: _____ Business Phone: (____) _____

Facility Type(s): _____ NAICS Code: _____ Financial Responsibility: _____

24 Hour Emergency Contact: _____ Emergency Phone: (____) _____

B. RESPONSIBLE PERSON INFORMATION - Identify Individual(s) or Business(es) responsible for storage tank management, fueling operations, and/or cleanup activities at the facility location named above. Provide additional information in an attachment if necessary.

| | | |
|--|---|----------------|
| Name: | Facility - Responsible Person Relation Type: | Effective Date |
| Mail address: | <input checked="" type="checkbox"/> Facility Account Owner (pays fees) | |
| City, ST, Zip: | Facility Account Owner information must be provided when the facility contains active (in-use) storage tanks on site. | |
| Contact: | | |
| Telephone: | STCM Account Number (if known) | |
| Identify other appropriate facility relationships for this party: <input type="checkbox"/> Facility Owner/Operator <input type="checkbox"/> Property Owner <input type="checkbox"/> Storage Tank Owner | | |

| | | |
|----------------|--|----------------|
| Name: | Other owner, relationship type(s) | Effective Date |
| Mail address: | <input type="checkbox"/> Facility Owner/Operator | |
| City, ST, Zip: | <input type="checkbox"/> Property Owner | |
| Contact: | <input type="checkbox"/> Storage Tank Owner | |
| Telephone: | <input type="checkbox"/> Other: | |

C. TANK/VESSEL INFORMATION - Complete one row for each storage tank or compression vessel system located at this facility.

| Tank ID | T/V | A/U | Capacity | Installed | Content | Status/Effective Date | Construction | Piping | Monitoring |
|---------|-----|-----|-----------|-----------|---------|-----------------------|--------------|--------|------------|
| 1 | T | A | 1.5 m gal | 1964 | D | B 08/01 | C | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Certified Contractor (performing tank installation or removal): _____ DBPR License No.: _____

Registration Certification: To the best of my knowledge and belief, all information submitted on this form is true, accurate, and complete.

Printed Name & Title

Signature

Date

DEP 62-761.900(2)

Northwest District
160 Governmental Center Blvd.
Pensacola, FL 32501
850-595-8360

Northeast District
7825 Baymeadows Way,
Suite B200
Jacksonville, FL 32256
904-448-4300

Central District
3319 Maguire Blvd.,
Suite 232
Orlando, FL 32803
407-894-7555

Southwest District
3804 Coconut Palm Drive
Tampa, FL 33619
813-744-8100

Southeast District
400 North Congress Ave.,
W Palm Beach, FL 33416
561-681-6600

South District
2295 Victoria Ave.,
Suite 364
Fort Myers, FL 33901
941-332-6975

Marathon Branch Office
2796 Overseas Hwy.,
Suite 221
Marathon, FL 33050
305-289-2310

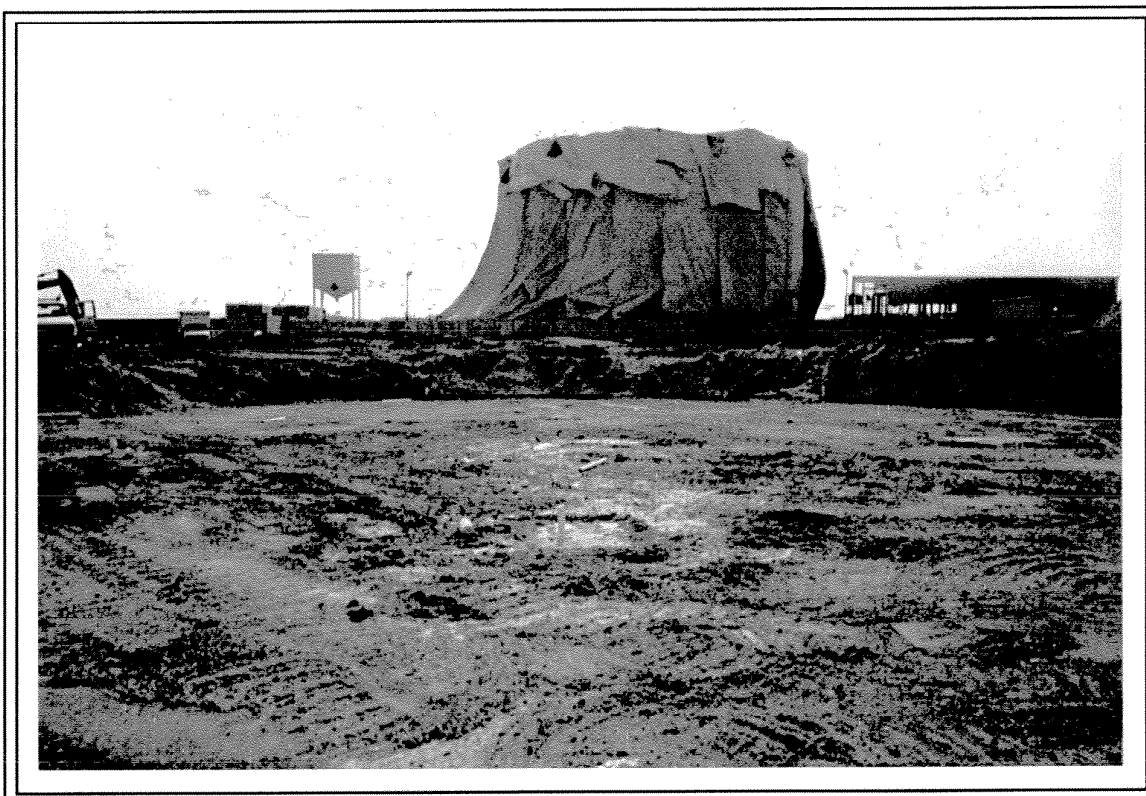
APPENDIX C
PHOTOGRAPHIC DOCUMENTATION



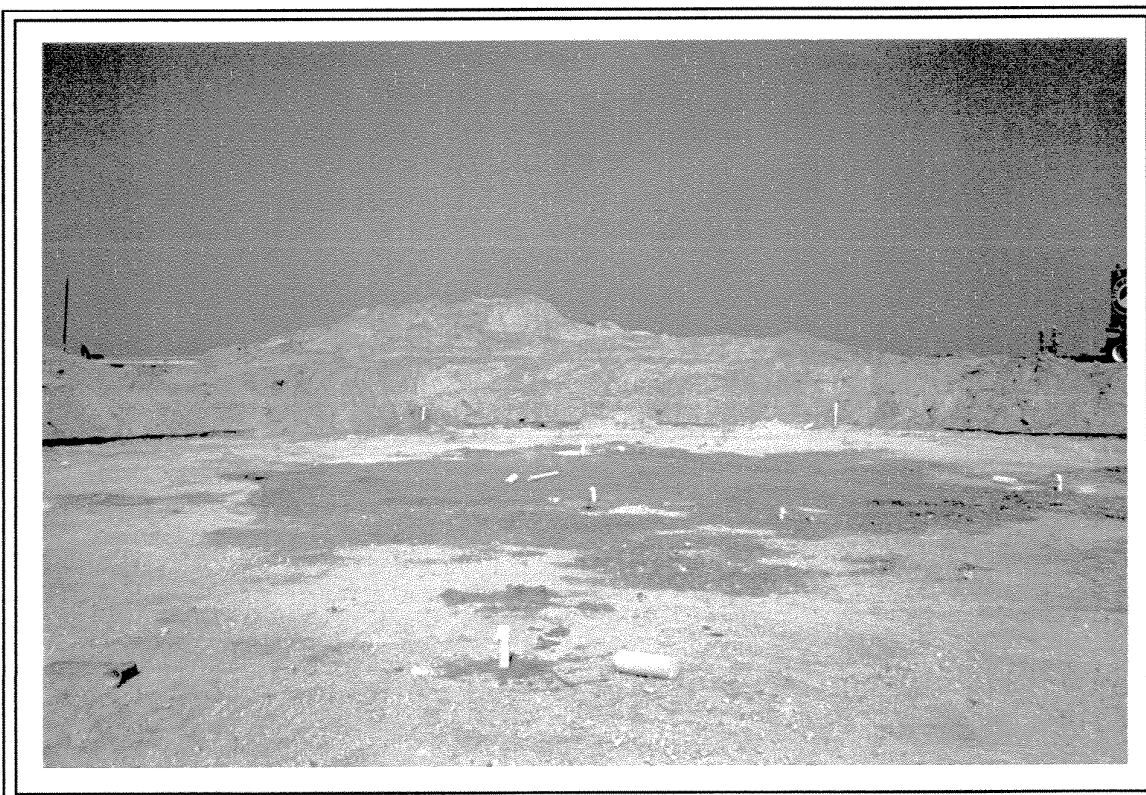
1) View facing north across the bottom of former Tank #204, St. Johns River in the background.



2) View facing west across the bottom former Tank #204, new tank and St. Johns River in the background.



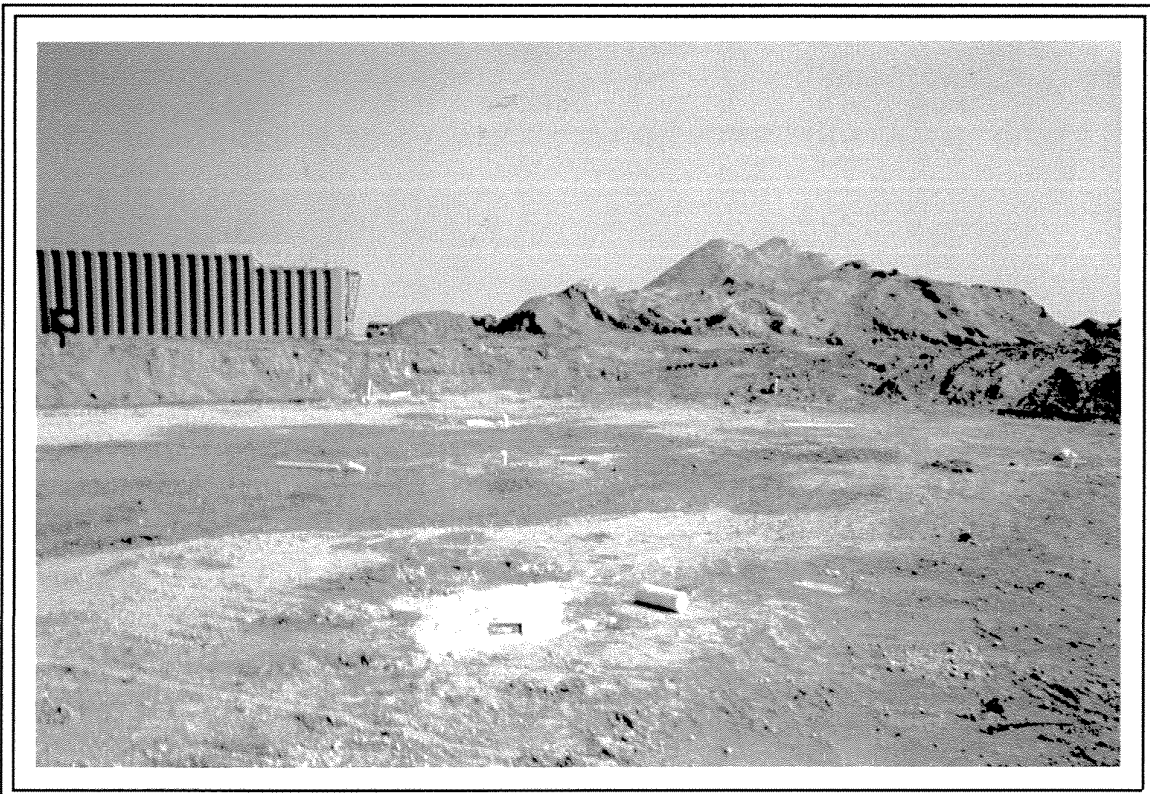
3) View facing south with new tank construction in the background.



4) View facing east across bottom of former Tank #204.



5) View facing northwest at soil/groundwater sampling locations in the former tank bottom and northwestern perimeter.



6) View facing southeast at soil/groundwater sampling locations in the former tank bottom and southeastern perimeter.

APPENDIX D
LABORATORY ANALYTICAL REPORTS

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX19195
DATE SUBMITTED: August 21, 2001
DATE REPORTED : August 30, 2001

PAGE 1 OF 27

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT : MAYPORT NAVAL ST.

Tank Closure

08/20/01

| | | |
|-----|---|-------------|
| #1 | - | PB4 @ 10:10 |
| #2 | - | PB6 @ 10:35 |
| #3 | - | PB5 @ 11:00 |
| #4 | - | PB7 @ 11:20 |
| #5 | - | PB8 @ 11:35 |
| #6 | - | TB1 @ 13:20 |
| #7 | - | TB2 @ 14:00 |
| #8 | - | TB3 @ 14:45 |
| #9 | - | TB4 @ 15:00 |
| #10 | - | TB5 @ 13:40 |

PROJECT MANAGER _____

Scott D. Martin

ENCO LABORATORIES

REPORT # : JAX19195

DATE REPORTED: August 30, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

PAGE 2 OF 27

RESULTS OF ANALYSIS

EPA METHOD 601 -
VOLATILE HALOCARBONS

| | <u>PB4</u> | <u>PB6</u> | <u>Units</u> |
|---------------------------|------------|------------|--------------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 5.0 U | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|----------------|---------------|
| Bromofluorobenzene | 57 | 56 | 37-161 |
| Date Analyzed | 08/24/01 16:44 | 08/24/01 17:45 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

PAGE 3 OF 27

RESULTS OF ANALYSIS**EPA METHOD 602 -
VOLATILE AROMATICS**

| | <u>PB4</u> | <u>PB6</u> | <u>Units</u> |
|-------------------------|------------|------------|--------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 1.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:

Bromofluorobenzene

Date Analyzed

% RECOV

116

08/24/01 16:44

% RECOV

117

08/24/01 17:45

LIMITS

52-147

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 8310 -****PAH BY HPLC**

| | <u>PB4</u> | <u>PB6</u> | <u>Units</u> |
|------------------------|-------------------|-------------------|---------------------|
| Naphthalene | 0.50 U | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | 0.50 U | µg/L |
| Fluorene | 0.10 U | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 0.46 | 0.10 U | µg/L |
| Pyrene | 1.1 | 0.26 | µg/L |
| Benzo(a)anthracene | 0.10 U | 0.10 U | µg/L |
| Chrysene | 0.10 U | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|-----------------------|-----------------------|----------------------|
| p-terphenyl | 77 | 77 | 43-148 |
| Date Prepared | 08/23/01 22:30 | 08/23/01 22:30 | |
| Date Analyzed | 08/27/01 11:12 | 08/27/01 12:04 | |

EPA METHOD 504 -**ETHYLENE DIBROMIDE**

| | <u>PB4</u> | <u>PB6</u> | <u>Units</u> |
|--------------------|-------------------|-------------------|---------------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 08/23/01 09:30 | 08/23/01 09:30 | |
| Date Analyzed | 08/24/01 12:40 | 08/24/01 12:58 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB4</u> | <u>PB6</u> | <u>Units</u> |
|---------------------|---------------|----------------|----------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 08/26/01 10:34 | 08/26/01 10:42 | |

**EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.**

| | <u>PB4</u> | <u>PB6</u> | <u>Units</u> |
|-----------------------|------------|------------|--------------|
| Hydrocarbons (C8-C40) | 7.7 | 0.20 U | mg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| o-Terphenyl | 84 | 86 | 65-140 |
| Date Prepared | 08/24/01 11:30 | 08/22/01 10:00 | |
| Date Analyzed | 08/29/01 13:02 | 08/23/01 13:43 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

PAGE 6 OF 27

RESULTS OF ANALYSIS**EPA METHOD 601 -****VOLATILE HALOCARBONS**

| | <u>PB5</u> | <u>PB7</u> | <u>Units</u> |
|---------------------------|-------------------|-------------------|---------------------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 5.0 U | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|-----------------------|-----------------------|----------------------|
| Bromofluorobenzene | 58 | 56 | 37-161 |
| Date Analyzed | 08/24/01 18:47 | 08/24/01 19:47 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

PAGE 7 OF 27

RESULTS OF ANALYSIS**EPA METHOD 602 -
VOLATILE AROMATICS**

| | <u>PB5</u> | <u>PB7</u> | <u>Units</u> |
|-------------------------|------------|------------|--------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 1.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:

Bromofluorobenzene

Date Analyzed

% RECOV

117

08/24/01 18:47

% RECOV

118

08/24/01 19:47

LIMITS

52-147

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

PAGE 8 OF 27

RESULTS OF ANALYSIS**EPA METHOD 8310 -****PAH BY HPLC**

| | <u>PB5</u> | <u>PB7</u> | <u>Units</u> |
|------------------------|-------------|-------------|--------------|
| Naphthalene | 0.50 U | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | 0.51 | µg/L |
| Fluorene | 0.10 U | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | 0.83 | µg/L |
| Pyrene | 0.21 | 1.3 | µg/L |
| Benzo(a)anthracene | 0.10 U | 0.10 U | µg/L |
| Chrysene | 0.10 U | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| p-terphenyl | 82 | 83 | 43-148 |
| Date Prepared | 08/23/01 22:30 | 08/23/01 22:30 | |
| Date Analyzed | 08/27/01 15:31 | 08/27/01 16:22 | |

EPA METHOD 504 -**ETHYLENE DIBROMIDE**

| | <u>PB5</u> | <u>PB7</u> | <u>Units</u> |
|--------------------|----------------|----------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 08/23/01 09:30 | 08/23/01 09:30 | |
| Date Analyzed | 08/24/01 13:16 | 08/24/01 13:43 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB5</u> | <u>PB7</u> | <u>Units</u> |
|---------------------|---------------|----------------|----------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 08/26/01 10:50 | 08/26/01 10:59 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>PB5</u> | <u>PB7</u> | <u>Units</u> |
|---|------------|------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | 3.3 | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| o-Terphenyl | 97 | 78 | 65-140 |
| Date Prepared | 08/22/01 10:00 | 08/24/01 12:00 | |
| Date Analyzed | 08/23/01 14:23 | 08/29/01 13:43 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 601 -
VOLATILE HALOCARBONS****PB8****TB1****Units**

| | | | |
|---------------------------|-------|-------|------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 5.0 U | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:**% RECOV****% RECOV****LIMITS**

Bromofluorobenzene

61

58

37-161

Date Analyzed

08/24/01 20:46

08/24/01 21:45

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 602 -
VOLATILE AROMATICS**

| | <u>PB8</u> | <u>TB1</u> | <u>Units</u> |
|-------------------------|------------|------------|--------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 1.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|----------------|---------------|
| Bromofluorobenzene | 121 | 116 | 52-147 |
| Date Analyzed | 08/24/01 20:46 | 08/24/01 21:45 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19195

DATE REPORTED: August 30, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 8310 -****PAH BY HPLC**

| | <u>PB8</u> | <u>TB1</u> | <u>Units</u> |
|------------------------|------------|------------|--------------|
| Naphthalene | 0.50 U | 3.1 | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | 3.9 | µg/L |
| 2-Methylnaphthalene | 1.0 U | 3.8 | µg/L |
| Acenaphthene | 0.50 U | 0.50 U | µg/L |
| Fluorene | 0.10 U | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | 0.94 | µg/L |
| Pyrene | 0.10 U | 1.1 | µg/L |
| Benzo(a)anthracene | 0.10 U | 0.10 U | µg/L |
| Chrysene | 0.10 U | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| p-terphenyl | 84 | 75 | 43-148 |
| Date Prepared | 08/23/01 22:30 | 08/23/01 22:30 | |
| Date Analyzed | 08/27/01 17:14 | 08/27/01 18:06 | |

EPA METHOD 504 -**ETHYLENE DIBROMIDE**

| | <u>PB8</u> | <u>TB1</u> | <u>Units</u> |
|--------------------|----------------|----------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 08/23/01 09:30 | 08/23/01 09:30 | |
| Date Analyzed | 08/24/01 14:19 | 08/24/01 14:37 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB8</u> | <u>TB1</u> | <u>Units</u> |
|---------------------|---------------|----------------|----------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 08/26/01 11:07 | 08/26/01 11:15 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>PB8</u> | <u>TB1</u> | <u>Units</u> |
|---|------------|------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | 1.2 | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| o-Terphenyl | 97 | 97 | 65-140 |
| Date Prepared | 08/24/01 12:00 | 08/24/01 12:00 | |
| Date Analyzed | 08/29/01 14:24 | 08/29/01 15:05 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED:** August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 601 -
VOLATILE HALOCARBONS****TB2****TB3****Units**

| | | | |
|---------------------------|-------|-------|------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 5.0 U | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:**% RECOV****% RECOV****LIMITS**

Bromofluorobenzene

53

62

37-161

Date Analyzed

08/24/01 22:43

08/24/01 23:41

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 602 -
VOLATILE AROMATICS**

| | <u>TB2</u> | <u>TB3</u> | <u>Units</u> |
|-------------------------|------------|------------|--------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 1.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|--------------------|----------------|----------------|---------------|
| Bromofluorobenzene | 118 | 117 | 52-147 |
| Date Analyzed | 08/24/01 22:43 | 08/24/01 23:41 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 8310 -****PAH BY HPLC**

| | <u>TB2</u> | <u>TB3</u> | <u>Units</u> |
|------------------------|-------------------|-------------------|---------------------|
| Naphthalene | 1.2 | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | 0.50 U | µg/L |
| Fluorene | 0.10 U | 0.10 U | µg/L |
| Phenanthrene | 1.2 | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 1.7 | 2.5 | µg/L |
| Pyrene | 1.6 | 2.7 | µg/L |
| Benzo(a)anthracene | 0.10 U | 0.64 | µg/L |
| Chrysene | 0.10 U | 0.76 | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|-----------------------|-----------------------|----------------------|
| p-terphenyl | 74 | 73 | 43-148 |
| Date Prepared | 08/23/01 22:30 | 08/23/01 22:30 | |
| Date Analyzed | 08/27/01 18:57 | 08/27/01 19:49 | |

EPA METHOD 504 -**ETHYLENE DIBROMIDE**

| | <u>TB2</u> | <u>TB3</u> | <u>Units</u> |
|--------------------|-------------------|-------------------|---------------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 08/23/01 09:30 | 08/23/01 09:30 | |
| Date Analyzed | 08/24/01 14:55 | 08/24/01 15:14 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TB2</u> | <u>TB3</u> | <u>Units</u> |
|---------------------|---------------|----------------|----------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 08/26/01 11:24 | 08/26/01 11:49 | |

**EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.**

| | <u>TB2</u> | <u>TB3</u> | <u>Units</u> |
|-----------------------|------------|------------|--------------|
| Hydrocarbons (C8-C40) | 0.87 | 1.1 | mg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| o-Terphenyl | 99 | 113 | 65-140 |
| Date Prepared | 08/24/01 12:00 | 08/24/01 12:00 | |
| Date Analyzed | 08/29/01 15:46 | 08/29/01 17:09 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19195

DATE REPORTED: August 30, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 601 -
VOLATILE HALOCARBONS**

| | <u>TB4</u> | <u>TB5</u> | <u>Units</u> |
|---------------------------|-----------------------|-----------------------|----------------------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 3.8 | 6.1 | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 5.0 U | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c 1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 57 | 56 | 37-161 |
| Date Analyzed | 08/25/01 04:29 | 08/25/01 05:26 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 602 -
VOLATILE AROMATICS**

| | <u>TB4</u> | <u>TB5</u> | <u>Units</u> |
|-------------------------|------------|------------|--------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 1.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:

Bromofluorobenzene

Date Analyzed

% RECOV

129

08/25/01 04:29

% RECOV

118

08/25/01 05:26

LIMITS

52-147

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19195

DATE REPORTED: August 30, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 8310 -
PAH BY HPLC**

| | <u>TB4</u> | <u>TB5</u> | <u>Units</u> |
|------------------------|------------|------------|--------------|
| Naphthalene | 0.50 U | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | 0.50 U | µg/L |
| Fluorene | 0.10 U | 0.10 U | µg/L |
| Phenanthrene | 2.3 | 1.6 | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 2.4 | 2.1 | µg/L |
| Pyrene | 2.3 | 1.9 | µg/L |
| Benzo(a)anthracene | 0.30 | 0.26 | µg/L |
| Chrysene | 0.33 | 0.28 | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |

Surrogate:

| | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|---------------|----------------|----------------|---------------|
| p-terphenyl | 91 | 103 | 43-148 |
| Date Prepared | 08/23/01 22:30 | 08/23/01 22:30 | |
| Date Analyzed | 08/27/01 20:41 | 08/27/01 21:32 | |

EPA METHOD 504 -**ETHYLENE DIBROMIDE**

| | <u>TB4</u> | <u>TB5</u> | <u>Units</u> |
|--------------------|----------------|----------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 08/23/01 09:30 | 08/23/01 09:30 | |
| Date Analyzed | 08/24/01 15:32 | 08/24/01 15:50 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>TB4</u> | <u>TB5</u> | <u>Units</u> |
|---------------------|---------------|----------------|----------------|--------------|
| Lead | 200.7 | 0.0060 I | 0.0080 I | mg/L |
| Date Analyzed | | 08/26/01 11:57 | 08/26/01 12:05 | |

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>TB4</u> | <u>TB5</u> | <u>Units</u> |
|-----------------------|------------|------------|--------------|
| Hydrocarbons (C8-C40) | 1.2 | 0.91 | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| o-Terphenyl | 104 | 96 | 65-140 |
| Date Prepared | 08/24/01 12:00 | 08/24/01 12:00 | |
| Date Analyzed | 08/29/01 17:50 | 08/29/01 18:31 | |

I = Analyte detected; value is between the Method Detection Level (MDL)
and the Practical Quantitation Level (PQL).

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED:** August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 601 -
VOLATILE HALOCARBONS****LAB BLANK****LAB BLANK****Units**

| | | | |
|---------------------------|-------|-------|------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 5.0 U | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |

Surrogate:**% RECOV****% RECOV****LIMITS**Bromofluorobenzene
Date Analyzed60
08/24/01 08:4060
08/24/01 08:40

37-161

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED:** August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 602 -
VOLATILE AROMATICS****LAB BLANK****LAB BLANK****Units**

Methyl tert-butyl ether
Benzene
Toluene
Chlorobenzene
Ethylbenzene
m-Xylene & p-Xylene
o-Xylene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene

2.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U

2.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U

µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L
µg/L

Surrogate:**% RECOV****% RECOV****LIMITS**

Bromofluorobenzene
Date Analyzed

118
08/24/01 08:40

118
08/24/01 08:40

52-147

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19195

DATE REPORTED: August 30, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS**EPA METHOD 8310 -
PAH BY HPLC****LAB BLANK****Units**

| | | |
|------------------------|--------|------|
| Naphthalene | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | µg/L |
| Fluorene | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | µg/L |
| Anthracene | 0.20 U | µg/L |
| Fluoranthene | 0.10 U | µg/L |
| Pyrene | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | µg/L |
| Chrysene | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | µg/L |

Surrogate:**% RECOV****LIMITS**

| | | |
|---------------|----------------|--------|
| p-terphenyl | 79 | 43-148 |
| Date Prepared | 08/23/01 22:30 | |
| Date Analyzed | 08/26/01 23:08 | |

**EPA METHOD 504 -
ETHYLENE DIBROMIDE****LAB BLANK****Units**

| | | |
|--------------------|----------------|------|
| Ethylene Dibromide | 0.020 U | µg/L |
| Date Prepared | 08/23/01 09:30 | |
| Date Analyzed | 08/23/01 11:58 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED:** August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>LAB BLANK</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------|---------------|------------------|------------------|--------------|
| Lead | 200.7 | 0.0050 U | NA | mg/L |
| Date Analyzed | | 08/24/01 11:19 | | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>LAB BLANK</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---|------------------|------------------|--------------|
| Hydrocarbons (C8-C40) | 0.20 U | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| o-Terphenyl | 84 | 100 | 65-140 |
| Date Prepared | 08/22/01 10:00 | 08/24/01 11:30 | |
| Date Analyzed | 08/22/01 16:54 | 08/29/01 11:41 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|-----------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 601</u> | | | | |
| Methylene Chloride | 112/116/111 | 45-161 | 4 | 29 |
| Chloroform | 114/136/111 | 64-154 | #18 | 16 |
| Carbon Tetrachloride | 124/136/116 | 71-165 | 9 | 21 |
| Trichloroethene | 117/126/114 | 69-158 | 7 | 24 |
| Tetrachloroethene | 125/128/119 | 63-166 | 2 | 21 |
| Chlorobenzene | 116/118/108 | 67-147 | 2 | 19 |
| <u>EPA Method 601</u> | | | | |
| Methylene Chloride | 110/122/102 | 45-161 | 10 | 29 |
| Chloroform | 124/125/105 | 64-154 | <1 | 16 |
| Carbon Tetrachloride | 120/124/111 | 71-165 | 3 | 21 |
| Trichloroethene | 118/126/109 | 69-158 | 6 | 24 |
| Tetrachloroethene | 120/122/104 | 63-166 | 2 | 21 |
| Chlorobenzene | 110/114/101 | 67-147 | 4 | 19 |
| <u>EPA Method 602</u> | | | | |
| Benzene | 130/130/120 | 60-138 | <1 | 17 |
| Toluene | 126/123/116 | 57-138 | 2 | 16 |
| Ethylbenzene | 136/132/121 | 49-144 | 3 | 17 |
| o-Xylene | 120/119/108 | 50-151 | <1 | 17 |
| <u>EPA Method 602</u> | | | | |
| Benzene | 118/126/119 | 60-138 | 6 | 17 |
| Toluene | 116/122/116 | 57-138 | 5 | 16 |
| Ethylbenzene | 122/124/118 | 49-144 | 2 | 17 |
| o-Xylene | 133/138/107 | 50-151 | 4 | 17 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

= One or more of the associated values failed to meet laboratory established limits for precision.

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ENCO LABORATORIES**REPORT #** : JAX19195**DATE REPORTED**: August 30, 2001**REFERENCE** : MAYPORT NAVAL ST.**PROJECT NAME** : Tank Closure

PAGE 27 OF 27

QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|------------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 75/ 65/ 75 | 59-111 | #14 | 12 |
| Acenaphthene | 72/ 69/ 79 | 58-128 | 4 | 13 |
| Benzo(a)pyrene | 89/ 84/ 88 | 78-134 | 6 | 15 |
| Benzo(g,h,i)perylene | 91/ 85/ 89 | 62-115 | 7 | 30 |
| <u>EPA Method 504</u> | | | | |
| Ethylene Dibromide | 68/ 64/ 96 | 57-130 | 6 | 18 |
| Dibromochloropropane | 72/ 76/104 | 60-130 | 5 | 20 |
| <u>TOTAL METALS</u> | | | | |
| Lead, 200.7 | 106/105/101 | 68-126 | <1 | 19 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 100/100/ 97 | 49-162 | <1 | 28 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 100/100/ 90 | 49-162 | <1 | 28 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

= One or more of the associated values failed to meet laboratory established limits for precision.

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted

01-150-06

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX19140
DATE SUBMITTED: August 16, 2001
DATE REPORTED : August 28, 2001

PAGE 1 OF 12

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT : MAYPORT NAVAL ST.

Tank Closure

08/16/01

| | | | | |
|----|---|---------|---|-------|
| #1 | - | PB-1-2' | @ | 11:45 |
| #2 | - | PB-2-4' | @ | 14:05 |
| #3 | - | PB-3-4' | @ | 15:20 |
| #4 | - | PB-4-4' | @ | 16:05 |
| #5 | - | PB-5-3' | @ | 17:15 |

PROJECT MANAGER

Scott D. Martin

ENCO LABORATORIES

REPORT # : JAX19140

DATE REPORTED: August 28, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICSPB-1-2'PB-2-4'Units

Methyl tert-butyl ether

1.3 U D1

1.5 U D2

µg/Kg

Benzene

1.3 U D1

1.5 U D2

µg/Kg

Toluene

1.3 U D1

1.5 U D2

µg/Kg

Chlorobenzene

1.3 U D1

1.5 U D2

µg/Kg

Ethylbenzene

1.3 U D1

1.5 U D2

µg/Kg

m-Xylene & p-Xylene

2.4 U D1

3.1 U D2

µg/Kg

o-Xylene

1.3 U D1

1.5 U D2

µg/Kg

1,3-Dichlorobenzene

1.3 U D1

1.5 U D2

µg/Kg

1,4-Dichlorobenzene

1.3 U D1

1.5 U D2

µg/Kg

1,2-Dichlorobenzene

1.3 U D1

1.5 U D2

µg/Kg

Surrogate:% RECOV% RECOVLIMITS

Dibromofluoromethane

97

97

70-134

D8-Toluene

98

95

60-144

Bromofluorobenzene

101

101

71-127

Date Prepared

08/17/01 17:45

08/17/01 17:45

Date Analyzed

08/22/01 12:33

08/22/01 13:05

U = Compound was analyzed for but not detected to the level shown.

D1 = Analyte value determined from a 1:1.07 dilution.

D2 = Analyte value determined from a 1:1.14 dilution.

ENCO LABORATORIES

REPORT # : JAX19140

DATE REPORTED: August 28, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>PB-1-2'</u> | <u>PB-2-4'</u> | <u>Units</u> |
|------------------------|----------------|----------------|--------------|
| Naphthalene | 19 U | 22 U | µg/Kg |
| Acenaphthylene | 38 U | 44 U | µg/Kg |
| 1-Methylnaphthalene | 38 U | 44 U | µg/Kg |
| 2-Methylnaphthalene | 38 U | 44 U | µg/Kg |
| Acenaphthene | 97 | 22 U | µg/Kg |
| Fluorene | 3.8 U | 4.4 U | µg/Kg |
| Phenanthrene | 200 | 44 U | µg/Kg |
| Anthracene | 19 U | 22 U | µg/Kg |
| Fluoranthene | 420 | 74 | µg/Kg |
| Pyrene | 430 | 84 | µg/Kg |
| Benzo(a)anthracene | 160 | 39 | µg/Kg |
| Chrysene | 150 | 40 | µg/Kg |
| Benzo(b)fluoranthene | 56 | 17 | µg/Kg |
| Benzo(k)fluoranthene | 40 | 11 | µg/Kg |
| Benzo(a)pyrene | 52 | 14 | µg/Kg |
| Dibenzo(a,h)anthracene | 17 | 4.7 | µg/Kg |
| Benzo(g,h,i)perylene | 20 | 5.6 | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 38 | 29 | µg/Kg |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| p-terphenyl | 89 | 80 | 39-141 |
| Date Prepared | 08/21/01 22:00 | 08/21/01 22:00 | |
| Date Analyzed | 08/24/01 15:47 | 08/24/01 16:38 | |

| <u>MISCELLANEOUS</u> | <u>METHOD</u> | <u>PB-1-2'</u> | <u>PB-2-4'</u> | <u>Units</u> |
|----------------------|---------------|----------------|----------------|--------------|
| Percent Solids | SM2540G | 87 | 75 | % |
| Date Analyzed | | 08/20/01 10:00 | 08/20/01 10:00 | |

J = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19140
 DATE REPORTED: August 28, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

Hydrocarbons (C8-C40)

PB-1-2'

7.6 U

PB-2-4'

8.8 U

Units

mg/Kg

Surrogate:

o-Terphenyl

Date Prepared

Date Analyzed

% RECOV

65

08/21/01 23:00

08/22/01 16:12

% RECOV

51

08/21/01 23:00

08/22/01 15:32

LIMITS

51-148

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JAX19140
 DATE REPORTED: August 28, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

| <u>EPA METHOD 8260 - VOLATILE ORGANICS</u> | | <u>PB-3-4'</u> | | <u>PB-4-4'</u> | | <u>Units</u> |
|--|----------------|----------------|--|----------------|--|---------------|
| Methyl tert-butyl ether | 1.4 U D3 | | | 130 U D4 | | µg/Kg |
| Benzene | 1.4 U D3 | | | 130 U D4 | | µg/Kg |
| Toluene | 1.4 U D3 | | | 130 U D4 | | µg/Kg |
| Chlorobenzene | 1.4 U D3 | | | 130 U D4 | | µg/Kg |
| Ethylbenzene | 1.4 U D3 | | | 130 U D4 | | µg/Kg |
| m-Xylene & p-Xylene | 2.8 U D3 | | | 260 U D4 | | µg/Kg |
| o-Xylene | 1.4 U D3 | | | 130 U D4 | | µg/Kg |
| 1,3-Dichlorobenzene | 1.4 U D3 | | | 130 U D4 | | µg/Kg |
| 1,4-Dichlorobenzene | 1.4 U D3 | | | 130 U D4 | | µg/Kg |
| 1,2-Dichlorobenzene | 1.4 U D3 | | | 130 U D4 | | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | | | <u>% RECOV</u> | | <u>LIMITS</u> |
| Dibromofluoromethane | 99 | | | 95 | | 70-134 |
| D8-Toluene | 96 | | | 95 | | 60-144 |
| Bromofluorobenzene | 97 | | | 95 | | 71-127 |
| Date Prepared | 08/17/01 17:45 | | | | | |
| Date Analyzed | 08/22/01 13:37 | | | 08/20/01 22:39 | | |

U = Compound was analyzed for but not detected to the level shown.
 D3 = Analyte value determined from a 1:1.1 dilution.
 D4 = Analyte value determined from a 1:100 dilution.

ENCO LABORATORIES
 REPORT # : JAX19140
 DATE REPORTED: August 28, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

| EPA METHOD 8310 - PAH BY HPLC | | | | | |
|----------------------------------|----------------|---|----------------|------|---------------|
| | PB-3-4' | | PB-4-4' | | Units |
| Naphthalene | 21 | U | 210 | U D5 | µg/Kg |
| Acenaphthylene | 42 | U | 430 | U D5 | µg/Kg |
| 1-Methylnaphthalene | 42 | U | 430 | U D5 | µg/Kg |
| 2-Methylnaphthalene | 42 | U | 430 | U D5 | µg/Kg |
| Acenaphthene | 21 | U | 210 | U D5 | µg/Kg |
| Fluorene | 4.2 | U | 43 | U D5 | µg/Kg |
| Phenanthrene | 42 | U | 430 | U D5 | µg/Kg |
| Anthracene | 21 | U | 210 | U D5 | µg/Kg |
| Fluoranthene | 23 | | 58 | D5 | µg/Kg |
| Pyrene | 42 | | 93 | D5 | µg/Kg |
| Benzo(a)anthracene | 21 | U | 210 | U D5 | µg/Kg |
| Chrysene | 10 | | 43 | U D5 | µg/Kg |
| Benzo(b)fluoranthene | 4.2 | U | 43 | U D5 | µg/Kg |
| Benzo(k)fluoranthene | 4.2 | U | 43 | U D5 | µg/Kg |
| Benzo(a)pyrene | 4.2 | U | 43 | U D5 | µg/Kg |
| Dibenzo(a,h)anthracene | 4.2 | U | 43 | U D5 | µg/Kg |
| Benzo(g,h,i)perylene | 4.2 | U | 43 | U D5 | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 4.2 | U | 43 | U D5 | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | | <u>% RECOV</u> | | <u>LIMITS</u> |
| p-terphenyl | 88 | | 77 | | 39-141 |
| Date Prepared | 08/21/01 22:00 | | 08/21/01 22:00 | | |
| Date Analyzed | 08/24/01 17:30 | | 08/27/01 13:47 | | |

| <u>MISCELLANEOUS</u> | <u>METHOD</u> | <u>PB-3-4'</u> | <u>PB-4-4'</u> | <u>Units</u> |
|----------------------|---------------|----------------|----------------|--------------|
| Percent Solids | SM2540G | 79 | 77 | % |
| Date Analyzed | | 08/20/01 10:00 | 08/20/01 10:00 | |

U = Compound was analyzed for but not detected to the level shown.
 D5 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES

REPORT # : JAX19140
 DATE REPORTED: August 28, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

| | <u>PB-3-4'</u> | <u>PB-4-4'</u> | <u>Units</u> |
|-----------------------|----------------|----------------|---------------|
| Hydrocarbons (C8-C40) | 350 | 5200 Db | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-Terphenyl | 78 | * | 51-148 |
| Date Prepared | 08/21/01 23:00 | 08/21/01 23:00 | |
| Date Analyzed | 08/22/01 15:42 | 08/22/01 16:52 | |

* = Surrogate recovery unavailable due to sample dilution.
 U = Compound was analyzed for but not detected to the level shown.
 Db = Analyte value determined from a 1:20 dilution.

ENCO LABORATORIES
 REPORT # : JAX19140
 DATE REPORTED: August 28, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

PB-5-3'

LAB BLANK

Units

| | | | |
|-------------------------|----------|----------|-------|
| Methyl tert-butyl ether | 1.4 U D2 | 100 U D4 | µg/Kg |
| Benzene | 1.4 U D2 | 100 U D4 | µg/Kg |
| Toluene | 1.4 U D2 | 100 U D4 | µg/Kg |
| Chlorobenzene | 1.4 U D2 | 100 U D4 | µg/Kg |
| Ethylbenzene | 1.4 U D2 | 100 U D4 | µg/Kg |
| m-Xylene & p-Xylene | 2.9 U D2 | 200 U D4 | µg/Kg |
| o-Xylene | 1.4 U D2 | 100 U D4 | µg/Kg |
| 1,3-Dichlorobenzene | 1.4 U D2 | 100 U D4 | µg/Kg |
| 1,4-Dichlorobenzene | 1.4 U D2 | 100 U D4 | µg/Kg |
| 1,2-Dichlorobenzene | 1.4 U D2 | 100 U D4 | µg/Kg |

Surrogate:

% RECOV

% RECOV

LIMITS

| | | | |
|----------------------|----------------|----------------|--------|
| Dibromofluoromethane | 90 | 92 | 70-134 |
| D8-Toluene | 115 | 91 | 60-144 |
| Bromofluorobenzene | 98 | 94 | 71-127 |
| Date Prepared | 08/17/01 17:45 | | |
| Date Analyzed | 08/22/01 14:16 | 08/20/01 13:36 | |

U = Compound was analyzed for but not detected to the level shown.
 D2 = Analyte value determined from a 1:1.14 dilution.
 D4 = Analyte value determined from a 1:100 dilution.

ENCO LABORATORIES

REPORT # : JAX19140

DATE REPORTED: August 28, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

| EPA METHOD 8310 - PAH BY HPLC | | PB-5-3' | LAB BLANK | Units |
|----------------------------------|------------------|----------------|----------------|---------------|
| Naphthalene | | 21 U | 16 U | µg/Kg |
| Acenaphthylene | | 42 U | 33 U | µg/Kg |
| 1-Methylnaphthalene | | 42 U | 33 U | µg/Kg |
| 2-Methylnaphthalene | | 42 U | 33 U | µg/Kg |
| Acenaphthene | 1900/18000/2.1 | 310 | 16 U | µg/Kg |
| Fluorene | 2200/28000/160 | 4.2 U | 3.3 U | µg/Kg |
| Phenanthrene | 2000/30000/250 | 760 | 33 U | µg/Kg |
| Anthracene | 1800/26000/2500 | 21 U | 16 U | µg/Kg |
| Fluoranthene | 2900/48000/1200 | 1200 | 3.3 U | µg/Kg |
| Pyrene | 2200/37000/880 | 1300 | 3.3 U | µg/Kg |
| Benzo(a)anthracene | 1.4/5/32 | 490 | 16 U | µg/Kg |
| Chrysene | 140/450/77 | 460 | 3.3 U | µg/Kg |
| Benzo(b)fluoranthene | 1.4/4.8/10 | 160 | 3.3 U | µg/Kg |
| Benzo(k)fluoranthene | 15/52/25 | 120 | 3.3 U | µg/Kg |
| Benzo(a)pyrene | 0.1/0.5/8 | 170 | 3.3 U | µg/Kg |
| Dibenzo(a,h)anthracene | 0.1/0.5/30 | 49 | 3.3 U | µg/Kg |
| Benzo(g,h,i)perylene | 2300/41000/32000 | 59 | 3.3 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 0.5/5.3/28 | 110 | 3.3 U | µg/Kg |
| Surrogate: | | % RECOV | % RECOV | LIMITS |
| p-terphenyl | | 122 | 91 | 39-141 |
| Date Prepared | | 08/21/01 22:00 | 08/21/01 22:00 | |
| Date Analyzed | | 08/24/01 18:22 | 08/23/01 01:15 | |

| MISCELLANEOUS | METHOD | PB-5-3' | LAB BLANK | Units |
|----------------|---------|----------------|-----------|-------|
| Percent Solids | SM2540G | 79 | NA | % |
| Date Analyzed | | 08/20/01 10:00 | | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19140
DATE REPORTED: August 28, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

PAGE 10 OF 12

RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

PB-5-3'

LAB BLANK

Units

Hydrocarbons (C8-C40)

14

b.b U

mg/Kg

Surrogate:

% RECOV

% RECOV

LIMITS

o-Terphenyl

60

68

51-148

Date Prepared

08/21/01 23:00

08/21/01 23:00

Date Analyzed

08/22/01 16:02

08/22/01 12:58

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19140

DATE REPORTED: August 28, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

PAGE 11 OF 12

RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

LAB BLANK

Units

Methyl tert-butyl ether
Benzene
Toluene
Chlorobenzene
Ethylbenzene
m-Xylene & p-Xylene
o-Xylene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene

1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
2.0 U
1.0 U
1.0 U
1.0 U
1.0 U

µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg
µg/Kg

Surrogate:

% RECOV

LIMITS

Dibromofluoromethane
D8-Toluene
Bromofluorobenzene
Date Analyzed

97
94
97

70-134
60-144
71-127

08/22/01 07:21

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19140

DATE REPORTED: August 28, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

PAGE 12 OF 12

QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|------------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 8260</u> | | | | |
| 1,1-Dichloroethene | 99/101/ 98 | 44-169 | 2 | 19 |
| Benzene | 102/103/101 | 50-140 | <1 | 23 |
| Trichloroethene | 92/ 94/ 92 | 75-125 | 2 | 17 |
| Toluene | 93/ 93/ 91 | 56-139 | <1 | 22 |
| Chlorobenzene | 100/100/101 | 73-123 | <1 | 24 |
| <u>EPA Method 8260</u> | | | | |
| 1,1-Dichloroethene | 92/ 92/ 98 | 44-169 | <1 | 19 |
| Benzene | 96/ 95/108 | 50-140 | 1 | 23 |
| Trichloroethene | 88/ 89/103 | 75-125 | 1 | 17 |
| Toluene | 90/ 87/ 95 | 56-139 | 3 | 22 |
| Chlorobenzene | 90/ 90/ 99 | 73-123 | <1 | 24 |
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 53/ 55/ 60 | 48-130 | 4 | 20 |
| Acenaphthene | 58/ 59/ 60 | 36-127 | 2 | 17 |
| Benzo(a)pyrene | 71/ 67/ 72 | 64-141 | 6 | 22 |
| Benzo(g,h,i)perylene | 71/ 70/ 78 | 58-168 | 1 | 21 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 101/ 77/101 | 62-204 | #27 | 25 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

= One or more of the associated values failed to meet laboratory established limits for precision.

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX19158
DATE SUBMITTED: August 17, 2001
DATE REPORTED : August 29, 2001

PAGE 1 OF 17

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT : MAYPORT NAVAL ST.

Tank Closure

08/17/01

| | | |
|----|------------|---------|
| #1 | - PB6-3' | @ 09:10 |
| #2 | - PB7-2' | @ 09:35 |
| #3 | - PB8-2' | @ 10:05 |
| #4 | - TB1-3' | @ 11:10 |
| #5 | - TB2-2.5' | @ 11:50 |
| #6 | - TB3-3.5' | @ 12:45 |
| #7 | - TB4-3' | @ 14:00 |
| #8 | - TB5-2.5' | @ 15:30 |

PROJECT MANAGER

Scott D. Martin

ENCO LABORATORIES

REPORT # : JAX19158
 DATE REPORTED: August 29, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

PAGE 2 OF 17

RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | <u>PB6-3'</u> | | <u>PB7-2'</u> | | <u>Units</u> |
|-------------------------|----------------|------|----------------|------|---------------|
| Methyl tert-butyl ether | 1.3 | U D1 | 2.0 | U D2 | µg/Kg |
| Benzene | 1.3 | U D1 | 2.0 | U D2 | µg/Kg |
| Toluene | 1.3 | U D1 | 2.0 | U D2 | µg/Kg |
| Chlorobenzene | 1.3 | U D1 | 2.0 | U D2 | µg/Kg |
| Ethylbenzene | 1.3 | U D1 | 2.0 | U D2 | µg/Kg |
| m-Xylene & p-Xylene | 2.7 | U D1 | 3.0 | U D2 | µg/Kg |
| o-Xylene | 1.4 | D1 | 1.7 | D2 | µg/Kg |
| 1,3-Dichlorobenzene | 1.3 | U D1 | 2.0 | U D2 | µg/Kg |
| 1,4-Dichlorobenzene | 1.3 | U D1 | 2.0 | U D2 | µg/Kg |
| 1,2-Dichlorobenzene | 1.3 | U D1 | 2.0 | U D2 | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | | <u>% RECOV</u> | | <u>LIMITS</u> |
| Dibromofluoromethane | 97 | | 99 | | 70-134 |
| D8-Toluene | 97 | | 98 | | 60-144 |
| Bromofluorobenzene | 100 | | 98 | | 71-127 |
| Date Prepared | 08/18/01 13:00 | | 08/18/01 13:00 | | |
| Date Analyzed | 08/21/01 23:49 | | 08/22/01 00:20 | | |

U = Compound was analyzed for but not detected to the level shown.
 D1 = Analyte value determined from a 1:1.13 dilution.
 D2 = Analyte value determined from a 1:1.02 dilution.

ENCO LABORATORIES

REPORT # : JAX19158

DATE REPORTED: August 29, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

PB6-3'

PB7-2'

Units

| | | | |
|------------------------|-------|-------|-------|
| Naphthalene | 20 U | 25 U | µg/Kg |
| Acenaphthylene | 39 U | 51 U | µg/Kg |
| 1-Methylnaphthalene | 39 U | 51 U | µg/Kg |
| 2-Methylnaphthalene | 39 U | 51 U | µg/Kg |
| Acenaphthene | 20 U | 25 U | µg/Kg |
| Fluorene | 3.9 U | 5.1 U | µg/Kg |
| Phenanthrene | 39 U | 51 U | µg/Kg |
| Anthracene | 20 U | 25 U | µg/Kg |
| Fluoranthene | 12 | 6.9 | µg/Kg |
| Pyrene | 15 | 7.8 | µg/Kg |
| Benzo(a)anthracene | 20 U | 25 U | µg/Kg |
| Chrysene | 3.9 U | 5.1 U | µg/Kg |
| Benzo(b)fluoranthene | 3.9 U | 5.1 U | µg/Kg |
| Benzo(k)fluoranthene | 3.9 U | 5.1 U | µg/Kg |
| Benzo(a)pyrene | 3.9 U | 5.1 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.9 U | 5.1 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.9 U | 5.1 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.9 U | 5.1 U | µg/Kg |

Surrogate:

% RECOV

% RECOV

LIMITS

| | | | |
|---------------|----------------|----------------|--------|
| p-terphenyl | 78 | 53 | 39-141 |
| Date Prepared | 08/22/01 20:00 | 08/22/01 20:00 | |
| Date Analyzed | 08/28/01 03:35 | 08/28/01 04:26 | |

MISCELLANEOUS

METHOD

PB6-3'

PB7-2'

Units

| | | | | |
|----------------|---------|----------------|----------------|---|
| Percent Solids | SM25406 | 84 | 65 | % |
| Date Prepared | | 08/20/01 10:15 | 08/20/01 10:15 | |
| Date Analyzed | | 08/21/01 11:30 | 08/21/01 11:30 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19158
 DATE REPORTED: August 29, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

Hydrocarbons (C8-C40)

PB6-3'

7.8 U

PB7-2'

10 U

Units

mg/Kg

Surrogate:

% RECOV

% RECOV

LIMITS

p-Terphenyl

111

57

51-148

Date Prepared

08/27/01 14:00

08/22/01 20:00

Date Analyzed

08/28/01 09:30

08/24/01 09:53

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19158
 DATE REPORTED: August 29, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

| | <u>PB8-2'</u> | | <u>TB1-3'</u> | <u>Units</u> |
|-------------------------|----------------|------|----------------|---------------|
| Methyl tert-butyl ether | 1.0 | U D3 | 1.1 | U µg/Kg |
| Benzene | 1.0 | U D3 | 1.1 | U µg/Kg |
| Toluene | 1.0 | U D3 | 1.1 | U µg/Kg |
| Chlorobenzene | 1.0 | U D3 | 1.1 | U µg/Kg |
| Ethylbenzene | 1.0 | U D3 | 1.1 | U µg/Kg |
| m-Xylene & p-Xylene | 2.3 | U D3 | 2.2 | U µg/Kg |
| o-Xylene | 1.2 | D3 | 1.0 | µg/Kg |
| 1,3-Dichlorobenzene | 1.0 | U D3 | 1.1 | U µg/Kg |
| 1,4-Dichlorobenzene | 1.0 | U D3 | 1.1 | U µg/Kg |
| 1,2-Dichlorobenzene | 1.0 | U D3 | 1.1 | U µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | | <u>% RECOV</u> | <u>LIMITS</u> |
| Dibromofluoromethane | 95 | | 86 | 70-134 |
| D8-Toluene | 97 | | 96 | 60-144 |
| Bromofluorobenzene | 99 | | 104 | 71-127 |
| Date Prepared | 08/18/01 13:00 | | 08/18/01 13:00 | |
| Date Analyzed | 08/22/01 00:50 | | 08/22/01 01:21 | |

U = Compound was analyzed for but not detected to the level shown.

D3 = Analyte value determined from a 1:1.04 dilution.

ENCO LABORATORIES

REPORT # : JAX19158

DATE REPORTED: August 29, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>PB8-2'</u> | <u>TB1-3'</u> | <u>Units</u> |
|------------------------|---------------|---------------|--------------|
| Naphthalene | 18 U | < 0.020 U | µg/Kg |
| Acenaphthylene | 36 U | 40 U | µg/Kg |
| 1-Methylnaphthalene | 36 U | 40 U | µg/Kg |
| 2-Methylnaphthalene | 36 U | 40 U | µg/Kg |
| Acenaphthene | 18 U | 20 U | µg/Kg |
| Fluorene | 3.6 U | 4.0 U | µg/Kg |
| Phenanthrene | 36 U | 40 U | µg/Kg |
| Anthracene | 18 U | 20 U | µg/Kg |
| Fluoranthene | 13 | 4.0 U | µg/Kg |
| Pyrene | 16 | 4.0 U | µg/Kg |
| Benzo(a)anthracene | 18 U | 20 U | µg/Kg |
| Chrysene | 3.6 U | 4.0 U | µg/Kg |
| Benzo(b)fluoranthene | 3.6 U | 4.0 U | µg/Kg |
| Benzo(k)fluoranthene | 3.6 U | 4.0 U | µg/Kg |
| Benzo(a)pyrene | 3.6 U | 4.0 U | µg/Kg |
| Dibenzo(a,h)anthracene | 3.6 U | 4.0 U | µg/Kg |
| Benzo(g,h,i)perylene | 3.6 U | 4.0 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 3.6 U | 4.0 U | µg/Kg |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| p-terphenyl | 82 | 85 | 39-141 |
| Date Prepared | 08/22/01 20:00 | 08/22/01 20:00 | |
| Date Analyzed | 08/28/01 05:18 | 08/28/01 07:02 | |

| <u>MISCELLANEOUS</u> | <u>METHOD</u> | <u>PB8-2'</u> | <u>TB1-3'</u> | <u>Units</u> |
|----------------------|---------------|----------------|----------------|--------------|
| Percent Solids | SM2540G | 91 | 82 | % |
| Date Prepared | | 08/20/01 10:15 | 08/20/01 10:15 | |
| Date Analyzed | | 08/21/01 11:30 | 08/21/01 11:30 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JAX19158
 DATE REPORTED: August 29, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

| <u>EPA METHOD FLPRO -</u> <u>PETROL. RESIDUAL ORG.</u> | <u>PB8-2'</u> | <u>TB1-3'</u> | <u>Units</u> |
|---|----------------|----------------|---------------|
| Hydrocarbons (C8-C40) | 7.2 U | 8.0 U | mg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-Terphenyl | 54 | 61 | 51-148 |
| Date Prepared | 08/22/01 20:00 | 08/22/01 20:00 | |
| Date Analyzed | 08/24/01 10:03 | 08/24/01 10:12 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19158

DATE REPORTED: August 29, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
VOLATILE ORGANICS

TB2-2.5'

TB3-3.5'

Units

| | | | |
|-------------------------|----------|-------|-------|
| Methyl tert-butyl ether | 1.0 U D2 | 1.0 U | µg/Kg |
| Benzene | 1.0 U D2 | 1.2 U | µg/Kg |
| Toluene | 1.5 D2 | 2.0 | µg/Kg |
| Chlorobenzene | 1.0 U D2 | 1.0 U | µg/Kg |
| Ethylbenzene | 1.0 U D2 | 1.0 U | µg/Kg |
| m-Xylene & p-Xylene | 2.0 U D2 | 2.0 U | µg/Kg |
| o-Xylene | 2.2 D2 | 1.8 | µg/Kg |
| 1,3-Dichlorobenzene | 1.0 U D2 | 1.0 U | µg/Kg |
| 1,4-Dichlorobenzene | 1.0 U D2 | 1.0 U | µg/Kg |
| 1,2-Dichlorobenzene | 1.0 U D2 | 1.0 U | µg/Kg |

Surrogate:

% RECOV

% RECOV

LIMITS

| | | | |
|----------------------|----------------|----------------|--------|
| Dibromofluoromethane | 47 | 54 | 70-134 |
| D8-Toluene | 98 | 96 | 60-144 |
| Bromofluorobenzene | 101 | 100 | 71-127 |
| Date Prepared | 08/18/01 13:00 | 08/18/01 13:00 | |
| Date Analyzed | 08/22/01 01:52 | 08/22/01 02:22 | |

U = Compound was analyzed for but not detected to the level shown.

D2 = Analyte value determined from a 1:1.02 dilution.

ENCO LABORATORIES

REPORT # : JAX19158
 DATE REPORTED: August 29, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

PAGE 9 OF 17

RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>TB2-2.5'</u> | <u>TB3-3.5'</u> | <u>Units</u> |
|------------------------|-----------------|-----------------|---------------|
| Naphthalene | 21 U | 20 U | µg/Kg |
| Acenaphthylene | 41 U | 40 U | µg/Kg |
| 1-Methylnaphthalene | 41 U | 40 U | µg/Kg |
| 2-Methylnaphthalene | 41 U | 40 U | µg/Kg |
| Acenaphthene | 21 U | 20 U | µg/Kg |
| Fluorene | 4.1 U | 4.0 U | µg/Kg |
| Phenanthrene | 41 U | 40 U | µg/Kg |
| Anthracene | 21 U | 20 U | µg/Kg |
| Fluoranthene | 4.1 U | 8.0 | µg/Kg |
| Pyrene | 4.1 U | 9.9 | µg/Kg |
| Benzo(a)anthracene | 21 U | 20 U | µg/Kg |
| Chrysene | 4.1 U | 4.0 U | µg/Kg |
| Benzo(b)fluoranthene | 4.1 U | 4.0 U | µg/Kg |
| Benzo(k)fluoranthene | 4.1 U | 4.0 U | µg/Kg |
| Benzo(a)pyrene | 4.1 U | 4.0 U | µg/Kg |
| Dibenzo(a,h)anthracene | 4.1 U | 4.0 U | µg/Kg |
| Benzo(g,h,i)perylene | 4.1 U | 4.0 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 4.1 U | 4.0 U | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-terphenyl | 82 | 79 | 39-141 |
| Date Prepared | 08/22/01 20:00 | 08/22/01 20:00 | |
| Date Analyzed | 08/28/01 07:53 | 08/28/01 08:45 | |

| <u>MISCELLANEOUS</u> | <u>METHOD</u> | <u>TB2-2.5'</u> | <u>TB3-3.5'</u> | <u>Units</u> |
|----------------------|---------------|-----------------|-----------------|--------------|
| Percent Solids | SM25406 | 80 | 82 | % |
| Date Prepared | | 08/20/01 10:15 | 08/20/01 10:15 | |
| Date Analyzed | | 08/21/01 11:30 | 08/21/01 11:30 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JAX19158
 DATE REPORTED: August 29, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

PAGE 10 OF 17

RESULTS OF ANALYSIS

MPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

Hydrocarbons (C8-C40)

Surrogate:

o-Terphenyl

Date Prepared

Date Analyzed

TB2-2.5'

8.2 U

% RECOV

64

08/22/01 20:00

08/24/01 10:40

TB3-3.5'

8.0 U

% RECOV

51

08/22/01 20:00

08/24/01 10:50

Units

mg/Kg

LIMITS

51-148

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JAX19158
 DATE REPORTED: August 29, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

PAGE 11 OF 17

RESULTS OF ANALYSIS

| <u>EPA METHOD 8260 - VOLATILE ORGANICS</u> | <u>TB4-3'</u> | <u>TB5-2.5'</u> | <u>Units</u> |
|--|----------------|-----------------|---------------|
| Methyl tert-butyl ether | 1.0 U | 1.0 U | µg/Kg |
| Benzene | 1.2 U | 1.2 U | µg/Kg |
| Toluene | 5.6 | 1.0 U | µg/Kg |
| Chlorobenzene | 1.0 U | 1.0 U | µg/Kg |
| Ethylbenzene | 2.1 | 1.0 U | µg/Kg |
| m-Xylene & p-Xylene | 7.0 | 2.3 U | µg/Kg |
| o-Xylene | 5.9 | 1.0 | µg/Kg |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/Kg |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/Kg |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Dibromofluoromethane | 42 | 96 | 70-134 |
| D8-Toluene | 98 | 101 | 60-144 |
| Bromofluorobenzene | 99 | 101 | 71-127 |
| Date Prepared | 08/18/01 13:00 | 08/18/01 13:00 | |
| Date Analyzed | 08/22/01 02:53 | 08/22/01 03:23 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19158

DATE REPORTED: August 29, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

TB4-3'

TB5-2.5'

Units

| | | | |
|------------------------|-------|-------|-------|
| Naphthalene | 20 U | 20 U | µg/Kg |
| Acenaphthylene | 41 U | 41 U | µg/Kg |
| 1-Methylnaphthalene | 41 U | 41 U | µg/Kg |
| 2-Methylnaphthalene | 41 U | 41 U | µg/Kg |
| Acenaphthene | 20 U | 20 U | µg/Kg |
| Fluorene | 4.1 U | 4.1 U | µg/Kg |
| Phenanthrene | 41 U | 41 U | µg/Kg |
| Anthracene | 20 U | 20 U | µg/Kg |
| Fluoranthene | 4.1 U | 4.1 U | µg/Kg |
| Pyrene | 4.1 U | 4.1 U | µg/Kg |
| Benzo(a)anthracene | 20 U | 20 U | µg/Kg |
| Chrysene | 4.1 U | 4.1 U | µg/Kg |
| Benzo(b)fluoranthene | 4.1 U | 4.1 U | µg/Kg |
| Benzo(k)fluoranthene | 4.1 U | 4.1 U | µg/Kg |
| Benzo(a)pyrene | 4.1 U | 4.1 U | µg/Kg |
| Dibenzo(a,h)anthracene | 4.1 U | 4.1 U | µg/Kg |
| Benzo(g,h,i)perylene | 4.1 U | 4.1 U | µg/Kg |
| Indeno(1,2,3-cd)pyrene | 4.1 U | 4.1 U | µg/Kg |

Surrogate:

% RECOV

% RECOV

LIMITS

| | | | |
|---------------|----------------|----------------|--------|
| p-terphenyl | 62 | 81 | 39-141 |
| Date Prepared | 08/22/01 20:00 | 08/22/01 20:00 | |
| Date Analyzed | 08/28/01 09:37 | 08/28/01 10:29 | |

MISCELLANEOUS

METHOD

TB4-3'

TB5-2.5'

Units

| | | | | |
|----------------|---------|----------------|----------------|---|
| Percent Solids | SM2540G | 81 | 81 | % |
| Date Prepared | | 08/20/01 10:15 | 08/20/01 10:15 | |
| Date Analyzed | | 08/21/01 11:30 | 08/21/01 11:30 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JAX19158
 DATE REPORTED: August 29, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

Hydrocarbons (C8-C40)

Surrogate:

p-Terphenyl

Date Prepared

Date Analyzed

TB4-3'

8.1 U

% RECOV

52

08/27/01 14:00

08/28/01 09:41

TB5-2.5'

8.1 U

% RECOV

59

08/22/01 20:00

08/24/01 11:09

Units

mg/Kg

LIMITS

51-148

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19158
 DATE REPORTED: August 29, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8260 -
 VOLATILE ORGANICS

| | <u>LAB</u> <u>BLANK</u> | <u>Units</u> |
|-------------------------|-------------------------|---------------|
| Methyl tert-butyl ether | 1.0 U | µg/Kg |
| Benzene | 1.0 U | µg/Kg |
| Toluene | 1.0 U | µg/Kg |
| Chlorobenzene | 1.0 U | µg/Kg |
| Ethylbenzene | 1.0 U | µg/Kg |
| m-Xylene & p-Xylene | 2.0 U | µg/Kg |
| o-Xylene | 1.0 U | µg/Kg |
| 1,3-Dichlorobenzene | 1.0 U | µg/Kg |
| 1,4-Dichlorobenzene | 1.0 U | µg/Kg |
| 1,2-Dichlorobenzene | 1.0 U | µg/Kg |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Dibromofluoromethane | 95 | 70-134 |
| D8-Toluene | 98 | 60-144 |
| Bromofluorobenzene | 98 | 71-127 |
| Date Analyzed | 08/21/01 18:04 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19158
 DATE REPORTED: August 29, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| <u>LAB BLANK</u> | <u>Units</u> |
|------------------------|------------------------|
| Naphthalene | 16 U $\mu\text{g/Kg}$ |
| Acenaphthylene | 33 U $\mu\text{g/Kg}$ |
| 1-Methylnaphthalene | 33 U $\mu\text{g/Kg}$ |
| 2-Methylnaphthalene | 33 U $\mu\text{g/Kg}$ |
| Acenaphthene | 16 U $\mu\text{g/Kg}$ |
| Fluorene | 3.3 U $\mu\text{g/Kg}$ |
| Phenanthrene | 33 U $\mu\text{g/Kg}$ |
| Anthracene | 16 U $\mu\text{g/Kg}$ |
| Fluoranthene | 3.3 U $\mu\text{g/Kg}$ |
| Pyrene | 3.3 U $\mu\text{g/Kg}$ |
| Benzo(a)anthracene | 16 U $\mu\text{g/Kg}$ |
| Chrysene | 3.3 U $\mu\text{g/Kg}$ |
| Benzo(b)fluoranthene | 3.3 U $\mu\text{g/Kg}$ |
| Benzo(k)fluoranthene | 3.3 U $\mu\text{g/Kg}$ |
| Benzo(a)pyrene | 3.3 U $\mu\text{g/Kg}$ |
| Dibenzo(a,h)anthracene | 3.3 U $\mu\text{g/Kg}$ |
| Benzo(g,h,i)perylene | 3.3 U $\mu\text{g/Kg}$ |
| Indeno(1,2,3-cd)pyrene | 3.3 U $\mu\text{g/Kg}$ |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|---------------|
| p-terphenyl | 91 | 39-141 |
| Date Prepared | 08/22/01 20:00 | |
| Date Analyzed | 08/27/01 23:16 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JAX19158
 DATE REPORTED: August 29, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD FLPRO -
PETROL. RESIDUAL ORG.

Hydrocarbons (C8-C40)

Surrogate:

o-Terphenyl

Date Prepared

Date Analyzed

LAB BLANK

b.b U

% RECOV

58

08/22/01 20:00

08/24/01 08:58

LAB BLANK

b.b U

% RECOV

59

08/27/01 14:00

08/28/01 09:10

Units

mg/Kg

LIMITS

51-148

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19158
 DATE REPORTED: August 29, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|------------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 8260</u> | | | | |
| 1,1-Dichloroethene | 84/ 85/ 96 | 44-169 | 1 | 19 |
| Benzene | 89/ 87/100 | 50-140 | 2 | 23 |
| Trichloroethene | 74/ 74/100 | 75-125 | <1 | 17 |
| Toluene | */ */ 92 | 56-139 | * | 22 |
| Chlorobenzene | 71/ 68/ 96 | 73-123 | 4 | 24 |
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 73/ 77/ 68 | 48-130 | 5 | 20 |
| Acenaphthene | 70/ 78/ 67 | 36-127 | 11 | 17 |
| Benzo(a)pyrene | 71/ 76/ 71 | 64-141 | 7 | 22 |
| Benzo(g,h,i)perylene | 74/ 78/ 88 | 58-168 | 5 | 21 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 71/ 70/ 67 | 62-204 | 1 | 25 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 71/ 70/ 76 | 62-204 | 1 | 25 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

* = MS/MSD/RPD unavailable due to high original sample concentration.

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX19159
DATE SUBMITTED: August 17, 2001
DATE REPORTED : August 30, 2001

PAGE 1 OF 11

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT : MAYPORT NAVAL ST.

Tank Closure

08/17/01

#1 - PB1 @ 15:00
#2 - PB2 @ 15:20
#3 - PB3 @ 15:40

PROJECT MANAGER

Scott D. Martin

ENCO LABORATORIES

REPORT # : JAX19159

DATE REPORTED: August 30, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

| EPA METHOD 601 - <u>VOLATILE HALOCARBONS</u> | | <u>PB1</u> | <u>PB2</u> | <u>Units</u> |
|---|----------------|----------------|---------------|--------------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L | |
| Chloromethane | 4.7 | 1.0 U | µg/L | |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L | |
| Bromomethane | 1.0 U | 1.0 U | µg/L | |
| Chloroethane | 1.0 U | 1.0 U | µg/L | |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L | |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L | |
| Methylene Chloride | 5.0 U | 5.0 U | µg/L | |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L | |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L | |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L | |
| Chloroform | 1.0 U | 1.0 U | µg/L | |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L | |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L | |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L | |
| Trichloroethene | 1.0 U | 1.0 U | µg/L | |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L | |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L | |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L | |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L | |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L | |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L | |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L | |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L | |
| Bromoform | 1.0 U | 1.0 U | µg/L | |
| 1,1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L | |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L | |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L | |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L | |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> | |
| Bromofluorobenzene | 54 | 50 | 37-161 | |
| Date Analyzed | 08/26/01 10:23 | 08/26/01 11:21 | | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19159
 DATE REPORTED: August 30, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>PB1</u> | <u>PB2</u> | <u>Units</u> |
|-------------------------|----------------|----------------|---------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 1.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 127 | 114 | 52-147 |
| Date Analyzed | 08/26/01 10:23 | 08/26/01 11:21 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19159

DATE REPORTED: August 30, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -

PAH BY HPLC

| | <u>PB1</u> | <u>PB2</u> | <u>Units</u> |
|------------------------|------------|------------|--------------|
| Naphthalene | 0.50 U | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | 0.50 U | µg/L |
| Fluorene | 0.10 U | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 0.95 | 0.14 | µg/L |
| Pyrene | 0.69 | 0.35 | µg/L |
| Benzo(a)anthracene | 0.10 U | 0.10 U | µg/L |
| Chrysene | 0.10 U | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |

Surrogate:% RECOV% RECOVLIMITS

| | | | |
|---------------|----------------|----------------|--------|
| p-terphenyl | 89 | 83 | 43-148 |
| Date Prepared | 08/23/01 22:30 | 08/23/01 22:30 | |
| Date Analyzed | 08/27/01 03:26 | 08/27/01 04:18 | |

EPA METHOD 504 -

ETHYLENE DIBROMIDE

| | <u>PB1</u> | <u>PB2</u> | <u>Units</u> |
|--------------------|----------------|----------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 08/23/01 09:30 | 08/23/01 09:30 | |
| Date Analyzed | 08/24/01 11:46 | 08/24/01 12:04 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19159
 DATE REPORTED: August 30, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB1</u> | <u>PB2</u> | <u>Units</u> |
|---------------------|---------------|----------------|----------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 08/24/01 12:25 | 08/24/01 12:34 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>PB1</u> | <u>PB2</u> | <u>Units</u> |
|---|----------------|----------------|---------------|
| Hydrocarbons (C8-C40) | 0.69 | 0.20 U | mg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-Terphenyl | 95 | 92 | 65-140 |
| Date Prepared | 08/22/01 10:00 | 08/22/01 10:00 | |
| Date Analyzed | 08/23/01 10:24 | 08/23/01 11:43 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19159

DATE REPORTED: August 30, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

| EPA METHOD 601 - VOLATILE HALOCARBONS | PB3 | LAB BLANK | Units |
|--|----------------|----------------|--------|
| Dichlorodifluoromethane | 1.0 U | 1.0 U | µg/L |
| Chloromethane | 1.0 U | 1.0 U | µg/L |
| Vinyl Chloride | 1.0 U | 1.0 U | µg/L |
| Bromomethane | 1.0 U | 1.0 U | µg/L |
| Chloroethane | 1.0 U | 1.0 U | µg/L |
| Trichlorofluoromethane | 2.0 U | 2.0 U | µg/L |
| 1,1-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Methylene Chloride | 5.0 U | 5.0 U | µg/L |
| t-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,1-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| c-1,2-Dichloroethene | 1.0 U | 1.0 U | µg/L |
| Chloroform | 1.0 U | 1.0 U | µg/L |
| 1,1,1-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Carbon Tetrachloride | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloroethane | 1.0 U | 1.0 U | µg/L |
| Trichloroethene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichloropropane | 1.0 U | 1.0 U | µg/L |
| Bromodichloromethane | 1.0 U | 1.0 U | µg/L |
| c-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| t-1,3-Dichloropropene | 1.0 U | 1.0 U | µg/L |
| 1,1,2-Trichloroethane | 1.0 U | 1.0 U | µg/L |
| Tetrachloroethene | 1.0 U | 1.0 U | µg/L |
| Dibromochloromethane | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Bromoform | 1.0 U | 1.0 U | µg/L |
| 1,1,2,2-Tetrachloroethane | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| Surrogate: | % RECOV | % RECOV | LIMITS |
| Bromofluorobenzene | 56 | 56 | 37-161 |
| Date Analyzed | 08/26/01 12:20 | 08/26/01 07:41 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19159
 DATE REPORTED: August 30, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 602 -
VOLATILE AROMATICS

| | <u>PB3</u> | <u>LAB BLANK</u> | <u>Units</u> |
|-------------------------|----------------|------------------|---------------|
| Methyl tert-butyl ether | 2.0 U | 2.0 U | µg/L |
| Benzene | 1.0 U | 1.0 U | µg/L |
| Toluene | 1.0 U | 1.0 U | µg/L |
| Chlorobenzene | 1.0 U | 1.0 U | µg/L |
| Ethylbenzene | 1.0 U | 1.0 U | µg/L |
| m-Xylene & p-Xylene | 1.0 U | 1.0 U | µg/L |
| o-Xylene | 1.0 U | 1.0 U | µg/L |
| 1,3-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,4-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| 1,2-Dichlorobenzene | 1.0 U | 1.0 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| Bromofluorobenzene | 120 | 127 | 52-147 |
| Date Analyzed | 08/26/01 12:20 | 08/26/01 07:41 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19159

DATE REPORTED: August 30, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

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RESULTS OF ANALYSIS

EPA METHOD 8310 -
PAH BY HPLC

| | <u>PB3</u> | <u>LAB BLANK</u> | <u>Units</u> |
|------------------------|----------------|------------------|---------------|
| Naphthalene | 0.50 U | 0.50 U | µg/L |
| Acenaphthylene | 1.0 U | 1.0 U | µg/L |
| 1-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| 2-Methylnaphthalene | 1.0 U | 1.0 U | µg/L |
| Acenaphthene | 0.50 U | 0.50 U | µg/L |
| Fluorene | 0.10 U | 0.10 U | µg/L |
| Phenanthrene | 1.0 U | 1.0 U | µg/L |
| Anthracene | 0.20 U | 0.20 U | µg/L |
| Fluoranthene | 0.17 | 0.10 U | µg/L |
| Pyrene | 0.57 | 0.10 U | µg/L |
| Benzo(a)anthracene | 0.10 U | 0.10 U | µg/L |
| Chrysene | 0.10 U | 0.10 U | µg/L |
| Benzo(b)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(k)fluoranthene | 0.10 U | 0.10 U | µg/L |
| Benzo(a)pyrene | 0.10 U | 0.10 U | µg/L |
| Dibenzo(a,h)anthracene | 0.10 U | 0.10 U | µg/L |
| Benzo(g,h,i)perylene | 0.10 U | 0.10 U | µg/L |
| Indeno(1,2,3-cd)pyrene | 0.10 U | 0.10 U | µg/L |
| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
| p-terphenyl | 79 | 79 | 43-148 |
| Date Prepared | 08/23/01 22:30 | 08/23/01 22:30 | |
| Date Analyzed | 08/27/01 06:53 | 08/26/01 23:08 | |

EPA METHOD 504 -
ETHYLENE DIBROMIDE

| | <u>PB3</u> | <u>LAB BLANK</u> | <u>Units</u> |
|--------------------|----------------|------------------|--------------|
| Ethylene Dibromide | 0.020 U | 0.020 U | µg/L |
| Date Prepared | 08/23/01 09:30 | 08/23/01 09:30 | |
| Date Analyzed | 08/24/01 12:22 | 08/23/01 11:58 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19159
 DATE REPORTED: August 30, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

PAGE 9 OF 11

RESULTS OF ANALYSIS

| <u>TOTAL METALS</u> | <u>METHOD</u> | <u>PB3</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---------------------|---------------|----------------|------------------|--------------|
| Lead | 200.7 | 0.0050 U | 0.0050 U | mg/L |
| Date Analyzed | | 08/24/01 12:58 | 08/24/01 11:19 | |

| <u>EPA METHOD FLPRO - PETROL. RESIDUAL ORG.</u> | <u>PB3</u> | <u>LAB BLANK</u> | <u>Units</u> |
|---|------------|------------------|--------------|
| Hydrocarbons (C8-C40) | 0.28 | 0.20 U | mg/L |

| <u>Surrogate:</u> | <u>% RECOV</u> | <u>% RECOV</u> | <u>LIMITS</u> |
|-------------------|----------------|----------------|---------------|
| o-Terphenyl | 92 | 84 | 65-140 |
| Date Prepared | 08/22/01 10:00 | 08/22/01 10:00 | |
| Date Analyzed | 08/23/01 12:23 | 08/22/01 16:54 | |

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX19159

DATE REPORTED: August 30, 2001

REFERENCE : MAYPORT NAVAL ST.

PROJECT NAME : Tank Closure

PAGE 10 OF 11

QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY</u> <u>MS/MSD/LCS</u> | <u>ACCEPT</u> <u>LIMITS</u> | <u>% RPD</u> <u>MS/MSD</u> | <u>ACCEPT</u> <u>LIMITS</u> |
|------------------------|--|--------------------------------|-------------------------------|--------------------------------|
| <u>EPA Method 601</u> | | | | |
| Methylene Chloride | 110/122/102 | 45-161 | 10 | 29 |
| Chloroform | 124/125/105 | 64-154 | <1 | 16 |
| Carbon Tetrachloride | 120/124/111 | 71-165 | 3 | 21 |
| Trichloroethene | 118/126/109 | 69-158 | 6 | 24 |
| Tetrachloroethene | 120/122/104 | 63-166 | 2 | 21 |
| Chlorobenzene | 110/114/101 | 67-147 | 4 | 19 |
| <u>EPA Method 602</u> | | | | |
| Benzene | 118/126/119 | 60-138 | 6 | 17 |
| Toluene | 116/122/116 | 57-138 | 5 | 16 |
| Ethylbenzene | 122/124/118 | 49-144 | 2 | 17 |
| o-Xylene | 133/138/107 | 50-151 | 4 | 17 |
| <u>EPA Method 8310</u> | | | | |
| Naphthalene | 75/ 65/ 75 | 59-111 | #14 | 12 |
| Acenaphthene | 72/ 69/ 79 | 58-128 | 4 | 13 |
| Benzo(a)pyrene | 89/ 84/ 88 | 78-134 | 6 | 15 |
| Benzo(g,h,i)perylene | 91/ 85/ 89 | 62-115 | 7 | 30 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

= One or more of the associated values failed to meet laboratory established limits for precision.

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

ENCO LABORATORIES

REPORT # : JAX19159
 DATE REPORTED: August 30, 2001
 REFERENCE : MAYPORT NAVAL ST.
 PROJECT NAME : Tank Closure

PAGE 11 OF 11

QUALITY CONTROL DATA

| <u>Parameter</u> | <u>% RECOVERY MS/MSD/LCS</u> | <u>ACCEPT LIMITS</u> | <u>% RPD MS/MSD</u> | <u>ACCEPT LIMITS</u> |
|------------------------------|----------------------------------|--------------------------|-------------------------|--------------------------|
| <u>EPA Method 504</u> | | | | |
| Ethylene Dibromide | 68/ 64/ 96 | 57-130 | 6 | 18 |
| Dibromochloropropane | 72/ 76/104 | 60-130 | 5 | 20 |
| <u>TOTAL METALS</u> | | | | |
| Lead, 200.7 | 106/105/101 | 68-126 | <1 | 19 |
| <u>PETROL. RESIDUAL ORG.</u> | | | | |
| Hydrocarbons (C8-C40) | 100/100/ 97 | 49-162 | <1 | 28 |

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted

APPENDIX B

GROUNDWATER SAMPLING FIELD DATA SHEETS

GROUNDWATER LEVEL MEASUREMENT SHEET

| | | | |
|----------------------------|---|--------------------------|------------------------|
| Project Name: | <u>NAVSTA Mayport</u> | Project No.: | <u>112G00412</u> |
| Location: | <u>FBTF</u> | Personnel: | <u>J. Gibson</u> |
| Weather Conditions: | <u>Clear & sunny</u> | Measuring Device: | <u>electronic tape</u> |
| Tidally Influenced: | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Remarks: | <u>—</u> |

[illegible]

ppm=parts per million; BK=background; and BH=borehole of the well.

* All measurements to the nearest 0.01 foot

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

| | | | |
|--|--|--------------------------------------|--|
| SITE NAME: Former Bulk Tank Facilities (FBTF) | | SITE LOCATION: NAVSTA Mayport | |
| WELL NO: MPT-08-MW12S | | SAMPLE ID: MPT-08-MW12S-0408 | |
| DATE: 4/23/08 | | | |

PURGING DATA

| | | | | |
|---|--|--|--|---|
| WELL DIAMETER (inches): 2" | TUBING DIAMETER (inches): 3/16" | WELL SCREEN INTERVAL DEPTH: feet 8 to 18 feet | STATIC DEPTH TO WATER (feet): 10.72 | PURGE PUMP TYPE OR BAILER: Peristaltic |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY only fill out if applicable <div style="text-align: center;"> $\frac{1.2}{18 - (10.72) \times 0.16}$ gallons </div> | | | | |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) <div style="text-align: center;"> _____ gallons </div> | | | | |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 12.7 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 12.7 | PURGING INITIATED AT: 1300 | PURGING ENDED AT: 1350 | TOTAL VOLUME PURGED (gallons): 2.0 |

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (µS/cm) | DISSOLVED OXYGEN (mg/L) | TURBIDITY (NTUs) | ORP (mV) | ODOR (describe) |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|---------------|-------------------------|------------------|----------|-----------------|
| 1300 | 0 | 0 | 0.04 | 10.74 | — | — | — | — | — | — | — |
| 1330 | 1.2 | 1.2 | 0.04 | 10.75 | 7.23 | 23.69 | 0.500 | 0.35 | 4.08 | -71.1 | none |
| 1335 | 0.2 | 1.4 | 0.04 | 10.75 | 7.21 | 23.52 | 0.494 | 0.24 | 4.48 | -67.1 | none |
| 1340 | 0.2 | 1.6 | 0.04 | 10.75 | 7.22 | 23.48 | 0.489 | 0.31 | 4.22 | -77.2 | none |
| 1345 | 0.2 | 1.8 | 0.04 | 10.75 | 7.21 | 23.48 | 0.487 | 0.33 | 4.20 | -79.8 | none |
| 1350 | 0.2 | 2.0 | 0.04 | 10.75 | 7.21 | 23.43 | 0.484 | 0.32 | 4.18 | -82.2 | none |
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WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

| SAMPLED BY (PRINT) / AFFILIATION: J. Gibson / TITUS | | | | SAMPLER(S) SIGNATURES: <i>J. Gibson</i> | | | SAMPLING INITIATED AT: 1350 | | SAMPLING ENDED AT: 1410 | |
|--|--------------|---------------|--------|--|-------------------------------|----------|-------------------------------------|--|--------------------------------|--|
| PUMP OR TUBING DEPTH IN WELL (feet): 12.7 | | | | SAMPLE PUMP FLOW RATE (mL per minute): 150 | | | TUBING MATERIAL CODE: Teflon | | | |
| FIELD DECONTAMINATION: Y (N) | | | | FIELD-FILTERED: Y (N) FILTER SIZE: _____ µm | | | DUPLICATE: Y (N) | | | |
| Filtration Equipment Type: _____ | | | | | | | | | | |
| SAMPLE CONTAINER SPECIFICATION | | | | SAMPLE PRESERVATION | | | INTENDED ANALYSIS AND/OR METHOD | | SAMPLING EQUIPMENT CODE | |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH | | | | |
| 1 | 3 | CG | 40 ml | HCL | NONE | <2 | VOCs (BTEX + MTBE)/8260B | | RFPP | |
| 2 | 1 | AG | 1 L | NONE | NONE | - | PAHs/8270C | | VT | |
| 3 | 2 | AG | 1 L | H ₂ SO ₄ | NONE | - | TRPH/FL-PRO | | VT | |
| | | | | | | | | | | |
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REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump
 RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

| | | | |
|---|--|---|----------------------|
| SITE NAME: Former Bulk Tank Facilities (FBTF) | | SITE LOCATION: NAVSTA Mayport | |
| WELL NO: MPT-09-MW01S | | SAMPLE ID: MPT-09-MW01S-0408 | DATE: 4/23/08 |

PURGING DATA

[illegible]

SAMPLING DATA

| | | | | | | | | | | |
|---|--------------|---------------|--------|---|-------------------------------|----------|--|--|-------------------------|--|
| SAMPLED BY (PRINT) / AFFILIATION: J. Gibson / TITUS | | | | SAMPLER(S) SIGNATURES: <i>J. Gibson</i> | | | SAMPLING INITIATED AT: 1500 | | SAMPLING ENDED AT: 1520 | |
| PUMP OR TUBING DEPTH IN WELL (feet): 13.3 | | | | SAMPLE PUMP FLOW RATE (mL per minute): 150 | | | TUBING MATERIAL CODE: Teflon | | | |
| FIELD DECONTAMINATION: Y <input checked="" type="checkbox"/> | | | | FIELD-FILTERED: Y <input checked="" type="checkbox"/> FILTER SIZE: _____ µm | | | DUPLICATE: Y <input checked="" type="checkbox"/> | | | |
| SAMPLE CONTAINER SPECIFICATION | | | | SAMPLE PRESERVATION | | | INTENDED ANALYSIS AND/OR METHOD | | SAMPLING EQUIPMENT CODE | |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH | | | | |
| 1 | 3 | CG | 40 ml | HCL | NONE | <2 | VOCs (BTEX + MTBE)/8260B | | RFPP | |
| 2 | 1 | AG | 1 L | NONE | NONE | - | PAHs/8270C | | VT | |
| 3 | 2 | AG | 1 L | H ₂ SO ₄ | NONE | - | TRPH/FL-PRO | | VT | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| REMARKS: | | | | | | | | | | |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify) | | | | | | | | | | |
| SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify) | | | | | | | | | | |

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

| | | | |
|--|--|--------------------------------------|--|
| SITE NAME: Former Bulk Tank Facilities (FBTF) | | SITE LOCATION: NAVSTA Mayport | |
| WELL NO: MPT-16-MW02S | | SAMPLE ID: MPT-FF-MW07-0408 | |
| DATE: 4/24/08 | | | |

PURGING DATA

| | | | | | | | | | | | |
|--|-------------------------|--|------------------|--|---------------------|--|---------------|---|------------------|----------|-----------------|
| WELL DIAMETER (inches): 2" | | TUBING DIAMETER (inches): 3/16" | | WELL SCREEN INTERVAL DEPTH: feet 5 to 15 feet | | STATIC DEPTH TO WATER (feet): 10.50 | | PURGE PUMP TYPE OR BAILER: Peristaltic | | | |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) <u>0.7</u> gallons <u>(15-10.50) x 0.16</u> | | | | | | | | | | | |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) _____ gallons | | | | | | | | | | | |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 12.5 | | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 12.5 | | PURGING INITIATED AT: 1000 | | PURGING ENDED AT: 1040 | | TOTAL VOLUME PURGED (gallons): 1.6 | | | |
| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (µS/cm) | DISSOLVED OXYGEN (mg/L) | TURBIDITY (NTUs) | ORP (mV) | ODOR (describe) |
| 1000 | 0 | 0 | 0.04 | 10.49 | — | — | — | — | — | — | — |
| 1020 | 0.8 | 0.8 | 0.04 | 10.49 | 7.45 | 22.22 | 0.351 | 3.44 | 3.38 | 40.8 | none |
| 1025 | 0.2 | 1.0 | 0.04 | 10.49 | 7.46 | 22.24 | 0.349 | 3.45 | 3.01 | 43.1 | none |
| 1028 | 0.12 | 1.12 | 0.04 | 10.49 | 7.40 | 22.26 | 0.348 | 3.30 | 2.84 | 45.0 | none |
| 1031 | 0.12 | 1.24 | 0.04 | 10.49 | 7.40 | 22.21 | 0.347 | 3.32 | 2.88 | 46.7 | none |
| 1034 | 0.12 | 1.36 | 0.04 | 10.49 | 7.43 | 22.23 | 0.346 | 3.29 | 2.82 | 50.3 | none |
| 1037 | 0.12 | 1.48 | 0.04 | 10.49 | 7.42 | 22.20 | 0.345 | 3.30 | 2.84 | 51.6 | none |
| 1040 | 0.12 | 1.60 | 0.04 | 10.49 | 7.44 | 22.20 | 0.344 | 3.29 | 2.80 | 52.4 | none |
| | | | | | | | | | | | |
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WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

| | | | | | | | | | | |
|---|--------------|---------------|--------|--|-------------------------------|----------|-------------------------------------|--|---|--|
| SAMPLED BY (PRINT) / AFFILIATION: J. Gibson / TINUS | | | | SAMPLER(S) SIGNATURES: | | | SAMPLING INITIATED AT: 1040 | | SAMPLING ENDED AT: 1100 | |
| PUMP OR TUBING DEPTH IN WELL (feet): 12.5 | | | | SAMPLE PUMP FLOW RATE (mL per minute): 150 | | | TUBING MATERIAL CODE: Teflon | | | |
| FIELD DECONTAMINATION: Y <input checked="" type="radio"/> N | | | | FIELD-FILTERED: Y <input checked="" type="radio"/> N | | | FILTER SIZE: _____ µm | | DUPLICATE: Y <input checked="" type="radio"/> N | |
| SAMPLE CONTAINER SPECIFICATION | | | | SAMPLE PRESERVATION | | | INTENDED ANALYSIS AND/OR METHOD | | SAMPLING EQUIPMENT CODE | |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH | | | | |
| 1 | 3 | CG | 40 ml | HCL | NONE | <2 | VOCs (BTEX + MTBE)/8260B | | RFPP | |
| 2 | 1 | AG | 1 L | NONE | NONE | - | PAHs/8270C | | VT | |
| 3 | 2 | AG | 1 L | H ₂ SO ₄ | NONE | - | TRPH/FL-PRO | | VT | |
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| REMARKS: | | | | | | | | | | |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify) | | | | | | | | | | |
| SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify) | | | | | | | | | | |

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

| | | | |
|--|--|--------------------------------------|--|
| SITE NAME: Former Bulk Tank Facilities (FBTF) | | SITE LOCATION: NAVSTA Mayport | |
| WELL NO: MPT-16-MW03S | | SAMPLE ID: MPT-16-MW03S-0408 | |
| DATE: 4/24/08 | | | |

PURGING DATA

| | | | | |
|---|--|--|--|---|
| WELL DIAMETER (inches): 2" | TUBING DIAMETER (inches): 3/16" | WELL SCREEN INTERVAL DEPTH: feet 5 to 15 feet | STATIC DEPTH TO WATER (feet): 10.90 | PURGE PUMP TYPE OR BAILER: Peristaltic |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY only fill out if applicable) <div style="text-align: center;">0.7 gallons (15 - 10.90) X .16</div> | | | | |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) <div style="text-align: center;">_____ gallons</div> | | | | |

| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13 | | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13 | | PURGING INITIATED AT: 1100 | | PURGING ENDED AT: 1129 | | TOTAL VOLUME PURGED (gallons): 1.16 | | | |
|--|-------------------------|--|------------------|-----------------------------------|---------------------|-------------------------------|---------------|--|------------------|-------------|-----------------|
| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (µS/cm) | DISSOLVED OXYGEN (mg/L) | TURBIDITY (NTUs) | ORP (mV) | ODOR (describe) |
| 1100 | 0 | 0 | 0.04 | 10.90 | 7.10 | 23.09 | 0.600 | 0.79 | 0.99 | 48.5 | NONE |
| 1120 | 0.8 | 0.8 | 0.04 | 10.90 | 7.09 | 23.25 | 0.603 | 0.57 | 0.80 | 33.1 | NONE |
| 1123 | 0.12 | 0.92 | 0.04 | 10.90 | 7.09 | 23.39 | 0.605 | 0.60 | 0.62 | 28.7 | NONE |
| 1126 | 0.12 | 1.04 | 0.04 | 10.90 | 7.09 | 23.34 | 0.605 | 0.63 | 0.56 | 28.2 | NONE |
| 1129 | 0.12 | 1.16 | 0.04 | 10.90 | 7.09 | 23.38 | 0.605 | 0.62 | 0.47 | 28.0 | NONE |
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WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

| SAMPLED BY (PRINT) / AFFILIATION: J. Gibson / TITUS | | | | SAMPLER(S) SIGNATURES: <i>J. Gibson</i> | | | | SAMPLING INITIATED AT: 1129 | | SAMPLING ENDED AT: 1150 | |
|---|--------------|---------------|--------------|--|--------------------------------|--------------|---------------------------------|--|-------------|--------------------------------|--|
| PUMP OR TUBING DEPTH IN WELL (feet): 13 | | | | SAMPLE PUMP FLOW RATE (mL per minute): _____ | | | | TUBING MATERIAL CODE: Teflon | | | |
| FIELD DECONTAMINATION: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> | | | | FIELD-FILTERED: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> FILTER SIZE: _____ µm | | | | DUPLICATE: Y <input type="checkbox"/> N <input type="checkbox"/> | | | |
| SAMPLE CONTAINER SPECIFICATION | | | | SAMPLE PRESERVATION | | | | INTENDED ANALYSIS AND/OR METHOD | | SAMPLING EQUIPMENT CODE | |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED | TOTAL VOL. ADDED IN FIELD (mL) | FINAL pH | | | | | |
| 1 | 3 | CG | 40 ml | HCL | NONE | <2 | VOCs (BTEX + MTBE)/8260B | | RFPP | | |
| 2 | 1 | AG | 1 L | NONE | NONE | - | PAHs/8270C | | VT | | |
| 3 | 2 | AG | 1 L | H₂SO₄ | NONE | - | TRPH/FL-PRO | | VT | | |
| | | | | | | | | | | | |
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REMARKS: **Collected as 1 and**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

| | | | |
|---|---------------------------------|---|----------------------|
| SITE NAME: Former Bulk Tank Facilities (FBTF) | | SITE LOCATION: NAVSTA Mayport | |
| WELL NO: FF-MW-08 | SAMPLE ID: FF-MW-08-0408 | | DATE: 4/24/08 |

PURGING DATA

| | | | | |
|---|--------------------------|-----------------------------|------------------------|------------------------|
| WELL | TUBING | WELL SCREEN INTERVAL | STATIC DEPTH | PURGE PUMP TYPE |
| DIAMETER (inches): 2" | DIAMETER (inches): 3/16" | DEPTH: 4.96 to 14.46 feet | TO WATER (feet): 10.54 | OR BAILER: Peristaltic |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY only fill out if applicable) | | | | |
| <div style="text-align: center;"> <u>0.6</u> gallons <u>(14.46 - 10.54)</u> x <u>0.16</u> </div> | | | | |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) | | | | |
| <div style="text-align: center;"> _____ gallons </div> | | | | |

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

| | | | | | | | | | | |
|---|--------------|---------------|--------|---|-------------------------------|----------|---------------------------------|--|-------------------------|--|
| SAMPLED BY (PRINT) / AFFILIATION: J. Gibson / TITNUS | | | | SAMPLER(S) SIGNATURES: <i>Joe Gibson</i> | | | SAMPLING INITIATED AT: 1134 | | SAMPLING ENDED AT: 1155 | |
| PUMP OR TUBING DEPTH IN WELL (feet): 12.5 | | | | SAMPLE PUMP FLOW RATE (mL per minute): 150 | | | TUBING MATERIAL CODE: Teflon | | | |
| FIELD DECONTAMINATION: Y (N) | | | | FIELD-FILTERED: Y (N) FILTER SIZE: _____ µm Filtration Equipment Type: _____ | | | DUPLICATE: Y (N) | | | |
| SAMPLE CONTAINER SPECIFICATION | | | | SAMPLE PRESERVATION | | | INTENDED ANALYSIS AND/OR METHOD | | SAMPLING EQUIPMENT CODE | |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH | | | | |
| 1 | 3 | CG | 40 ml | HCL | NONE | <2 | VOCs (BTEX + MTBE)/8260B | | RFPP | |
| 2 | 1 | AG | 1 L | NONE | NONE | - | PAHs/8270C | | VT | |
| 3 | 2 | AG | 1 L | H ₂ SO ₄ | NONE | - | TRPH/FL-PRO | | VT | |
| | | | | | | | | | | |
| | | | | | | | | | | |

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

| | | | |
|---|--|---|--|
| SITE NAME: Former Bulk Tank Facilities (FBTF) | | SITE LOCATION: NAVSTA Mayport | |
| WELL NO: MPT-09-MW02S | | DATE: 4/24/08 | |

PURGING DATA

| FORGING DATA | | | |
|--|------------------------------------|--|--|
| WELL DIAMETER (inches): 2" | TUBING DIAMETER (inches): 3/16" | WELL SCREEN INTERVAL DEPTH: feet 5 to 15 feet | STATIC DEPTH TO WATER (feet): 11.40 |
| PURGE PUMP TYPE OR BAILER: Peristaltic | | | |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) | | | |
| <div style="text-align: center;"> <u>0.6</u> gallons $(15 - 11.40) \times 0.16$ </div> | | | |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) | | | |
| <div style="text-align: center;"> _____ gallons </div> | | | |

[illegible]

SAMPLING DATA

| | | | | | | | | | | |
|---|--------------|---------------|--------|--|-------------------------------|----------|---------------------------------|--|---|--|
| SAMPLED BY (PRINT) / AFFILIATION: J. Gibson / TINUS | | | | SAMPLER(S) SIGNATURES: <i>Joe Gibson</i> | | | SAMPLING INITIATED AT: 1254 | | SAMPLING ENDED AT: 1315 | |
| PUMP OR TUBING DEPTH IN WELL (feet): 13.5 | | | | SAMPLE PUMP FLOW RATE (mL per minute): 150 | | | TUBING MATERIAL CODE: Teflon | | | |
| FIELD DECONTAMINATION: Y <input checked="" type="radio"/> N | | | | FIELD-FILTERED: Y <input checked="" type="radio"/> N | | | FILTER SIZE: _____ µm | | DUPLICATE: Y <input checked="" type="radio"/> N | |
| SAMPLE CONTAINER SPECIFICATION | | | | SAMPLE PRESERVATION | | | INTENDED ANALYSIS AND/OR METHOD | | SAMPLING EQUIPMENT CODE | |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH | | | | |
| 1 | 3 | CG | 40 ml | HCL | NONE | <2 | VOCs (BTEX + MTBE)/8260B | | RFPP | |
| 2 | 1 | AG | 1 L | NONE | NONE | - | PAHs/8270C | | VT | |
| 3 | 2 | AG | 1 L | H ₂ SO ₄ | NONE | - | TRPH/FL-PRO | | VT | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| REMARKS: | | | | | | | | | | |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify) | | | | | | | | | | |
| SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify) | | | | | | | | | | |

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

| | | | |
|--|--|--------------------------------------|--|
| SITE NAME: Former Bulk Tank Facilities (FBTF) | | SITE LOCATION: NAVSTA Mayport | |
| WELL NO: MPT-09-MW03S | | SAMPLE ID: MPT-09-MW03S-0408 | |
| DATE: 4/24/08 | | | |

PURGING DATA

| | | | | |
|---|--|--|---|---|
| WELL DIAMETER (inches): 2" | TUBING DIAMETER (inches): 3/16" | WELL SCREEN INTERVAL DEPTH: feet 5 to 15 feet | STATIC DEPTH TO WATER (feet): 9.60 | PURGE PUMP TYPE OR BAILER: Peristaltic |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY only fill out if applicable <div style="text-align: center;"><u>0.9</u> gallons <u>(15 - 9.60) x 0.16</u></div> | | | | |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) <div style="text-align: center;">_____ gallons</div> | | | | |

| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 11.6 | | | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11.6 | | | PURGING INITIATED AT: 1315 | | PURGING ENDED AT: 1347 | | TOTAL VOLUME PURGED (gallons): 1.28 | |
|--|-------------------------|--------------------------------|--|-----------------------|---------------------|-----------------------------------|---------------|-------------------------------|------------------|--|-----------------|
| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (µS/cm) | DISSOLVED OXYGEN (mg/L) | TURBIDITY (NTUs) | ORP (mV) | ODOR (describe) |
| 1315 | 0 | 0 | 0.04 | 9.60 | — | — | — | — | — | — | — |
| 1338 | 0.92 | 0.92 | 0.04 | 9.60 | 6.96 | 23.38 | 0.654 | 0.26 | 2.29 | -0.4 | none |
| 1341 | 0.12 | 1.04 | 0.04 | 9.60 | 6.96 | 23.36 | 0.653 | 0.28 | 2.69 | -1.3 | none |
| 1344 | 0.12 | 1.16 | 0.04 | 9.60 | 6.97 | 23.32 | 0.653 | 0.25 | 2.42 | -2.4 | none |
| 1347 | 0.12 | 1.28 | 0.04 | 9.60 | 6.96 | 23.34 | 0.653 | 0.24 | 2.38 | -2.4 | none |
| | | | | | | | | | | | |
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WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

| SAMPLED BY (PRINT) / AFFILIATION: J. Gibson / TITNUS | | | | SAMPLER(S) SIGNATURES: | | | SAMPLING INITIATED AT: 1347 | | SAMPLING ENDED AT: 1410 | |
|---|--------------|---------------|--------|---|-------------------------------|----------|---|--|--------------------------------|--|
| PUMP OR TUBING DEPTH IN WELL (feet): 11.6 | | | | SAMPLE PUMP FLOW RATE (mL per minute): 150 | | | TUBING MATERIAL CODE: Teflon | | | |
| FIELD DECONTAMINATION: Y <input checked="" type="radio"/> N | | | | FIELD-FILTERED: Y <input checked="" type="radio"/> N FILTER SIZE: _____ µm | | | DUPLICATE: Y <input checked="" type="radio"/> N | | | |
| SAMPLE CONTAINER SPECIFICATION | | | | SAMPLE PRESERVATION | | | INTENDED ANALYSIS AND/OR METHOD | | SAMPLING EQUIPMENT CODE | |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH | | | | |
| 1 | 3 | CG | 40 ml | HCL | NONE | <2 | VOCs (BTEX + MTBE)/8260B | | RFPP | |
| 2 | 1 | AG | 1 L | NONE | NONE | - | PAHs/8270C | | VT | |
| 3 | 2 | AG | 1 L | H ₂ SO ₄ | NONE | - | TRPH/FL-PRO | | VT | |
| | | | | | | | | | | |
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| REMARKS: | | | | | | | | | | |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify) | | | | | | | | | | |
| SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify) | | | | | | | | | | |

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|---|--|-----------------------------|--|---------------------------------------|--|--------------------------------|--|---|--|---|--|-------------------|--|--|--|--------------|--|--|--|--|--|
| PROJECT NO: 112600412 | | FACILITY: Mayport - FBTF | | PROJECT MANAGER Mark Peterson | | PHONE NUMBER (904) 636-6125 | | LABORATORY NAME AND CONTACT: ENCO | | | | | | | | | | | | | |
| SAMPLERS (SIGNATURE) Joe Gibson | | | | FIELD OPERATIONS LEADER Joe Gibson | | PHONE NUMBER (904) 636-6125 | | ADDRESS 4810 Executive Park Ct. St. 21 | | | | | | | | | | | | | |
| | | | | CARRIER/WAYBILL NUMBER Drop Off | | | | CITY, STATE Jacksonville, FL. 32216 | | | | | | | | | | | | | |
| STANDARD TAT <input checked="" type="checkbox"/> RUSH TAT <input type="checkbox"/> <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day | | | | TOP DEPTH (FT) | | BOTTOM DEPTH (FT) | | MATRIX (GW, SO, SW, SD, QC, ETC.) | | COLLECTION METHOD GRAP (G) COMP (C) | | No. OF CONTAINERS | | CONTAINER TYPE PLASTIC (P) or GLASS (G) | | | | | | | |
| PRESERVATIVE USED | | | | | | | | | | | | | | | | | | | | | |
| DATE YEAR 2008 | | TIME | | SAMPLE ID | | LOCATION ID | | TYPE OF ANALYSIS | | COMMENTS | | | | | | | | | | | |
| 4/23 | | 0000 | | MPT-FF-Trip blank | | | | QC | | G | | 3 | | X | | Cool to 4 °C | | | | | |
| 11 | | 1350 | | MPT-08-MW12S-0408 | | | | GW | | G | | 6 | | X X X | | | | | | | |
| 11 | | 1500 | | MPT-09-MW01S-0408 | | | | GW | | G | | 6 | | X X X | | | | | | | |
| 4/24 | | 1040 | | MPT-FF-MW07-0408 | | | | GW | | G | | 6 | | X X X | | | | | | | |
| 11 | | 1129 | | MPT-16-MW03S-0408 | | | | GW | | G | | 6 | | X X X | | | | | | | |
| 11 | | 1129 | | MPT-16-MW03S-0408-MS | | | | QC | | G | | 6 | | X X X | | MS | | | | | |
| 11 | | 1129 | | MPT-16-MW03S-0408-MSD | | | | QC | | G | | 6 | | X X X | | MSD | | | | | |
| 11 | | 1134 | | MPT-FF-MW08-0408 | | | | GW | | G | | 6 | | X X X | | | | | | | |
| 11 | | 1254 | | MPT-09-MW02S-0408 | | | | GW | | G | | 6 | | X X X | | | | | | | |
| 11 | | 1347 | | MPT-09-MW03S-0408 | | | | GW | | G | | 6 | | X X X | | | | | | | |
| 11 | | 1435 | | MPT-16-FB1-0408 | | | | QC | | G | | 6 | | X X X | | Job # | | | | | |
| | | | | | | | | | | | | | | | | CTO 31 | | | | | |
| | | | | | | | | | | | | | | | | Fuel Farm | | | | | |
| 1. RELINQUISHED BY Joe Gibson | | | | DATE 4/24/08 | | TIME 1644 | | 1. RECEIVED BY [Signature] | | | | DATE 4/24/08 | | TIME 1644 | | | | | | | |
| 2. RELINQUISHED BY | | | | DATE | | TIME | | 2. RECEIVED BY | | | | DATE | | TIME | | | | | | | |
| 3. RELINQUISHED BY | | | | DATE | | TIME | | 3. RECEIVED BY | | | | DATE | | TIME | | | | | | | |
| COMMENTS | | | | | | | | | | | | | | | | | | | | | |



PROJECT NAME : NAVSTA Mayport

INSTRUMENT NAME/MODEL: YSI 556 / LaMotte 2020

SITE NAME: FBTF

MANUFACTURER: YSI / LaMotte

PROJECT No.: 112G00412

SERIAL NUMBER: 04J15531 / ME-11937

[illegible]

APPENDIX C

LABORATORY ANALYTICAL REPORT

Environmental Conservation Laboratories, Inc.

4810 Executive Park Court, Suite 211

Jacksonville FL, 32216-6069

Phone: 904.296.3007 FAX: 904.296.6210



www.encolabs.com

Thursday, May 1, 2008

Tetra Tech NUS (BR006)

Attn: Mark Peterson

8640 Philips Highway Suite 16

Jacksonville, FL 32256

RE: Laboratory Results for

Project Number: 112G00412, Project Name/Desc: Mayport Fuel Farm

ENCO Workorder: B802812

Dear Mark Peterson,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, April 24, 2008.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Jacksonville. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, reading "Lorraine Strong". The signature is written in a cursive, flowing style.

Lorraine Strong

Project Manager

Enclosure(s)

CASE NARRATIVE

Tetra Tech NUS, Inc/Mayport Fuel Farm, CTO 031
Project Manager Mr. Mark Peterson
SDG BR006-031

| Lab Sample ID | Client Sample ID |
|---------------|-------------------------------|
| B802812-01 | MPT-FF-Trip Blank Cooler J199 |
| B802812-02 | MPT-FF-Trip Blank Cooler LB5 |
| B802812-03 | MPT-FF-Trip Blank Cooler C3 |
| B802812-04 | MPT-08-MW12S-0408 |
| B802812-05 | MPT-09-MW01S-0408 |
| B802812-06 | MPT-FF-MW07-0408 |
| B802812-07 | MPT-16-MW03S-0408MS/MSD |
| B802812-08 | MPT-FF-MW08-0408 |
| B802812-09 | MPT-09-MW02S-0408 |
| B802812-10 | MPT-09-MW03S-0408 |
| B802812-11 | MPT-16-FBI-0408 |

Overview

All samples submitted were analyzed by Environmental Conservation Laboratories, Inc. in accordance with the methods referenced in the laboratory report. Sample MPT-16-MW03S-0408 [B802812-07] was the designated matrix spike/matrix spike duplicate. Any particular difficulties encountered during sample handling and processing will be discussed in the Remarks section below.

Remarks

EPA Method 8260B

The laboratory received two additional Trip blanks with this project; however, these samples were not listed on the chain of custody.

Lorraine Strong
Project Manager



www.encolabs.com

SAMPLE SUMMARY/LABORATORY CHRONICLE

| | | | | | | | |
|-------------------|--------------------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|
| Client ID: | MPT-FF-Trip Blank Cooler J199 | Lab ID: | B802812-01 | Sampled: | 04/23/08 00:00 | Received: | 04/24/08 16:44 |
|-------------------|--------------------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|

| | | | |
|------------------|--------------------------|--------------------------|------------------------------|
| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
| EPA 8260B | 05/07/08 | 04/30/08 09:42 | 4/30/2008 15:42 |

| | | | | | | | |
|-------------------|-------------------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|
| Client ID: | MPT-FF-Trip Blank Cooler LB5 | Lab ID: | B802812-02 | Sampled: | 04/23/08 00:00 | Received: | 04/24/08 16:44 |
|-------------------|-------------------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|

| | | | |
|------------------|--------------------------|--------------------------|------------------------------|
| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
| EPA 8260B | 05/07/08 | 04/30/08 09:42 | 4/30/2008 16:15 |

| | | | | | | | |
|-------------------|------------------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|
| Client ID: | MPT-FF-Trip Blank Cooler C3 | Lab ID: | B802812-03 | Sampled: | 04/23/08 00:00 | Received: | 04/24/08 16:44 |
|-------------------|------------------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|

| | | | |
|------------------|--------------------------|--------------------------|------------------------------|
| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
| EPA 8260B | 05/07/08 | 04/30/08 09:42 | 4/30/2008 16:48 |

| | | | | | | | |
|-------------------|--------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|
| Client ID: | MPT-08-MW12S-0408 | Lab ID: | B802812-04 | Sampled: | 04/23/08 13:50 | Received: | 04/24/08 16:44 |
|-------------------|--------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|

| | | | |
|------------------|--------------------------|--------------------------|------------------------------|
| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
| EPA 8260B | 05/07/08 | 04/30/08 09:42 | 4/30/2008 17:21 |
| EPA 8270C | 04/30/08 06/07/08 | 04/28/08 12:34 | 4/29/2008 00:19 |
| FLPRO | 04/30/08 06/07/08 | 04/28/08 12:36 | 4/28/2008 18:55 |

| | | | | | | | |
|-------------------|--------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|
| Client ID: | MPT-09-MW01S-0408 | Lab ID: | B802812-05 | Sampled: | 04/23/08 15:00 | Received: | 04/24/08 16:44 |
|-------------------|--------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|

| | | | |
|------------------|--------------------------|--------------------------|------------------------------|
| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
| EPA 8260B | 05/07/08 | 04/30/08 09:42 | 4/30/2008 17:54 |
| EPA 8270C | 04/30/08 06/07/08 | 04/28/08 12:34 | 4/29/2008 00:40 |
| FLPRO | 04/30/08 06/07/08 | 04/28/08 12:36 | 4/28/2008 19:19 |

| | | | | | | | |
|-------------------|-------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|
| Client ID: | MPT-FF-MW07-0408 | Lab ID: | B802812-06 | Sampled: | 04/24/08 10:40 | Received: | 04/24/08 16:44 |
|-------------------|-------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|

| | | | |
|------------------|--------------------------|--------------------------|------------------------------|
| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
| EPA 8260B | 05/08/08 | 04/30/08 09:42 | 4/30/2008 18:27 |
| EPA 8270C | 05/01/08 06/07/08 | 04/28/08 12:34 | 4/29/2008 01:01 |
| FLPRO | 05/01/08 06/07/08 | 04/28/08 12:36 | 4/28/2008 20:28 |

| | | | | | | | |
|-------------------|--------------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|
| Client ID: | MPT-16-MW03S-0408MS/MSD | Lab ID: | B802812-07 | Sampled: | 04/24/08 11:29 | Received: | 04/24/08 16:44 |
|-------------------|--------------------------------|----------------|-------------------|-----------------|-----------------------|------------------|-----------------------|

| | | | |
|------------------|--------------------------|--------------------------|------------------------------|
| Parameter | Hold Date/Time(s) | Prep Date/Time(s) | Analysis Date/Time(s) |
| EPA 8260B | 05/08/08 | 04/30/08 09:42 | 4/30/2008 15:08 |
| EPA 8270C | 05/01/08 06/07/08 | 04/28/08 12:34 | 4/29/2008 01:22 |
| FLPRO | 05/01/08 06/07/08 | 04/28/08 12:36 | 4/28/2008 18:32 |



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| Client ID: MPT-FF-MW08-0408 | | Lab ID: B802812-08 | | Sampled: 04/24/08 11:34 | | Received: 04/24/08 16:44 | |
|-----------------------------|-------------------|--------------------|-------------------|-------------------------|-----------------------|--------------------------|-------|
| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) | | |
| EPA 8260B | 05/08/08 | | 04/30/08 | 09:42 | 4/30/2008 | | 19:00 |
| EPA 8270C | 05/01/08 | 06/07/08 | 04/28/08 | 12:34 | 4/29/2008 | | 01:43 |
| FLPRO | 05/01/08 | 06/07/08 | 04/28/08 | 12:36 | 4/28/2008 | | 20:51 |

| Client ID: MPT-09-MW02S-0408 | | Lab ID: B802812-09 | | Sampled: 04/24/08 12:54 | | Received: 04/24/08 16:44 | |
|------------------------------|-------------------|--------------------|-------------------|-------------------------|-----------------------|--------------------------|--|
| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) | | |
| EPA 8260B | 05/08/08 | | 04/30/08 09:42 | | 4/30/2008 19:33 | | |
| EPA 8270C | 05/01/08 | 06/07/08 | 04/28/08 | 12:34 | 4/29/2008 02:04 | | |
| FLPRO | 05/01/08 | 06/07/08 | 04/28/08 | 12:36 | 4/28/2008 21:14 | | |

| Client ID: MPT-09-MW03S-0408 | | Lab ID: B802812-10 | | Sampled: 04/24/08 13:47 | | Received: 04/24/08 16:44 | |
|------------------------------|-------------------|--------------------|-------------------|-------------------------|-----------------------|--------------------------|--|
| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) | | |
| EPA 8260B | 05/08/08 | | 04/30/08 09:42 | | 4/30/2008 20:06 | | |
| EPA 8270C | 05/01/08 | 06/07/08 | 04/28/08 | 12:34 | 4/29/2008 02:25 | | |
| FLPRO | 05/01/08 | 06/07/08 | 04/28/08 | 12:36 | 4/28/2008 21:37 | | |

| Client ID: MPT-16-FB1-0408 | | Lab ID: B802812-11 | | Sampled: 04/24/08 14:35 | | Received: 04/24/08 16:44 | |
|----------------------------|-------------------|--------------------|-------------------|-------------------------|-----------------------|--------------------------|-------|
| Parameter | Hold Date/Time(s) | | Prep Date/Time(s) | | Analysis Date/Time(s) | | |
| EPA 8260B | 05/08/08 | | 04/30/08 | 09:42 | 4/30/2008 | | 20:39 |
| EPA 8270C | 05/01/08 | 06/07/08 | 04/28/08 | 12:34 | 4/29/2008 | | 02:46 |
| FLPRO | 05/01/08 | 06/07/08 | 04/28/08 | 12:36 | 4/28/2008 | | 22:00 |

SAMPLE DETECTION SUMMARY

| | | | |
|-------------------|--------------------------|----------------|-------------------|
| Client ID: | MPT-08-MW12S-0408 | Lab ID: | B802812-04 |
|-------------------|--------------------------|----------------|-------------------|

| Analyte | Results | Flag | PQL | Units | Method | Notes |
|--------------|---------|------|-------|-------|--------|-------|
| TPH (C8-C40) | 0.057 | I | 0.170 | mg/L | FLPRO | |

| | | | |
|-------------------|--------------------------|----------------|-------------------|
| Client ID: | MPT-09-MW01S-0408 | Lab ID: | B802812-05 |
|-------------------|--------------------------|----------------|-------------------|

| Analyte | Results | Flag | PQL | Units | Method | Notes |
|--------------|---------|------|-------|-------|--------|-------|
| TPH (C8-C40) | 0.056 | I | 0.170 | mg/L | FLPRO | |

| | | | |
|-------------------|-------------------------|----------------|-------------------|
| Client ID: | MPT-FF-MW07-0408 | Lab ID: | B802812-06 |
|-------------------|-------------------------|----------------|-------------------|

| Analyte | Results | Flag | PQL | Units | Method | Notes |
|--------------|---------|------|-------|-------|--------|-------|
| TPH (C8-C40) | 0.050 | I | 0.170 | mg/L | FLPRO | |

| | | | |
|-------------------|--------------------------------|----------------|-------------------|
| Client ID: | MPT-16-MW03S-0408MS/MSD | Lab ID: | B802812-07 |
|-------------------|--------------------------------|----------------|-------------------|

| Analyte | Results | Flag | PQL | Units | Method | Notes |
|--------------|---------|------|-------|-------|--------|-------|
| TPH (C8-C40) | 0.059 | I | 0.170 | mg/L | FLPRO | |

| | | | |
|-------------------|-------------------------|----------------|-------------------|
| Client ID: | MPT-FF-MW08-0408 | Lab ID: | B802812-08 |
|-------------------|-------------------------|----------------|-------------------|

| Analyte | Results | Flag | PQL | Units | Method | Notes |
|--------------|---------|------|-------|-------|-----------|-------|
| Acenaphthene | 0.03 | I | 0.10 | ug/L | EPA 8270C | |
| Fluorene | 0.03 | I | 0.10 | ug/L | EPA 8270C | |
| Naphthalene | 0.04 | I | 0.10 | ug/L | EPA 8270C | |
| TPH (C8-C40) | 0.155 | I | 0.170 | mg/L | FLPRO | |

| | | | |
|-------------------|--------------------------|----------------|-------------------|
| Client ID: | MPT-09-MW02S-0408 | Lab ID: | B802812-09 |
|-------------------|--------------------------|----------------|-------------------|

| Analyte | Results | Flag | PQL | Units | Method | Notes |
|---------------------|---------|------|-------|-------|-----------|-------|
| 1-Methylnaphthalene | 0.13 | | 0.10 | ug/L | EPA 8270C | |
| Acenaphthene | 0.08 | I | 0.10 | ug/L | EPA 8270C | |
| Fluorene | 0.08 | I | 0.10 | ug/L | EPA 8270C | |
| Naphthalene | 0.10 | I | 0.10 | ug/L | EPA 8270C | |
| TPH (C8-C40) | 0.962 | | 0.170 | mg/L | FLPRO | |

| | | | |
|-------------------|--------------------------|----------------|-------------------|
| Client ID: | MPT-09-MW03S-0408 | Lab ID: | B802812-10 |
|-------------------|--------------------------|----------------|-------------------|

| Analyte | Results | Flag | PQL | Units | Method | Notes |
|--------------|---------|------|-------|-------|--------|-------|
| TPH (C8-C40) | 0.103 | I | 0.170 | mg/L | FLPRO | |

| | | | |
|-------------------|------------------------|----------------|-------------------|
| Client ID: | MPT-16-FB1-0408 | Lab ID: | B802812-11 |
|-------------------|------------------------|----------------|-------------------|

| Analyte | Results | Flag | PQL | Units | Method | Notes |
|--------------|---------|------|-------|-------|-----------|-------|
| Naphthalene | 0.03 | I | 0.10 | ug/L | EPA 8270C | |
| Toluene | 0.34 | I | 1.0 | ug/L | EPA 8260B | |
| TPH (C8-C40) | 0.143 | I | 0.170 | mg/L | FLPRO | |



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ANALYTICAL RESULTS

Description: MPT-FF-Trip Blank Cooler J199

Lab Sample ID: B802812-01

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/23/08 00:00

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By:

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|---------------------------------------|---------|------|-------|----|------|-----|---------|-----------|----------------|-----|-------|
| Benzene [71-43-2] ^ | 0.23 | U | ug/L | 1 | 0.23 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 15:42 | JAL | |
| Ethylbenzene [100-41-4] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 15:42 | JAL | |
| Methyl-tert-Butyl Ether [1634-04-4] ^ | 0.21 | U | ug/L | 1 | 0.21 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 15:42 | JAL | |
| Toluene [108-88-3] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 15:42 | JAL | |
| Xylenes (Total) [NA] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 15:42 | JAL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|----------------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|-----|-------|
| 4-Bromofluorobenzene | 53 | 1 | 50.0 | 106 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 15:42 | JAL | |
| Dibromofluoromethane | 55 | 1 | 50.0 | 110 % | 70-135 | 8D30017 | EPA 8260B | 04/30/08 15:42 | JAL | |
| Toluene-d8 | 54 | 1 | 50.0 | 108 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 15:42 | JAL | |



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Description: MPT-FF-Trip Blank Cooler LB5

Matrix: Ground Water

Project: Mayport Fuel Farm

Lab Sample ID: B802812-02

Sampled: 04/23/08 00:00

Sampled By:

Received: 04/24/08 16:44

Work Order: B802812

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|---------------------------------------|---------|------|-------|----|------|-----|---------|-----------|----------------|-----|-------|
| Benzene [71-43-2] ^ | 0.23 | U | ug/L | 1 | 0.23 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 16:15 | JAL | |
| Ethylbenzene [100-41-4] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 16:15 | JAL | |
| Methyl-tert-Butyl Ether [1634-04-4] ^ | 0.21 | U | ug/L | 1 | 0.21 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 16:15 | JAL | |
| Toluene [108-88-3] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 16:15 | JAL | |
| Xylenes (Total) [NA] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 16:15 | JAL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|----------------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|-----|-------|
| 4-Bromofluorobenzene | 53 | 1 | 50.0 | 107 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 16:15 | JAL | |
| Dibromofluoromethane | 54 | 1 | 50.0 | 107 % | 70-135 | 8D30017 | EPA 8260B | 04/30/08 16:15 | JAL | |
| Toluene-d8 | 54 | 1 | 50.0 | 108 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 16:15 | JAL | |

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.



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Description: MPT-FF-Trip Blank Cooler C3

Lab Sample ID: B802812-03

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/23/08 00:00

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By:

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|---------------------------------------|---------|------|-------|----|------|-----|---------|-----------|----------------|-----|-------|
| Benzene [71-43-2] ^ | 0.23 | U | ug/L | 1 | 0.23 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 16:48 | JAL | |
| Ethylbenzene [100-41-4] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 16:48 | JAL | |
| Methyl-tert-Butyl Ether [1634-04-4] ^ | 0.21 | U | ug/L | 1 | 0.21 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 16:48 | JAL | |
| Toluene [108-88-3] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 16:48 | JAL | |
| Xylenes (Total) [NA] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 16:48 | JAL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|----------------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|-----|-------|
| 4-Bromofluorobenzene | 55 | 1 | 50.0 | 110 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 16:48 | JAL | |
| Dibromofluoromethane | 53 | 1 | 50.0 | 106 % | 70-135 | 8D30017 | EPA 8260B | 04/30/08 16:48 | JAL | |
| Toluene-d8 | 57 | 1 | 50.0 | 114 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 16:48 | JAL | |

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.



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Description: MPT-08-MW12S-0408

Lab Sample ID: B802812-04

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/23/08 13:50

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| <u>Analyte</u> [CAS Number] | <u>Results</u> | <u>Flag</u> | <u>Units</u> | <u>DF</u> | <u>MDL</u> | <u>PQL</u> | <u>Batch</u> | <u>Method</u> | <u>Analyzed</u> | <u>By</u> | <u>Notes</u> |
|---------------------------------------|----------------|-------------|------------------|--------------|---------------------|--------------|---------------|-----------------|-----------------|--------------|--------------|
| Benzene [71-43-2] ^ | 0.23 | U | ug/L | 1 | 0.23 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 17:21 | JAL | |
| Ethylbenzene [100-41-4] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 17:21 | JAL | |
| Methyl-tert-Butyl Ether [1634-04-4] ^ | 0.21 | U | ug/L | 1 | 0.21 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 17:21 | JAL | |
| Toluene [108-88-3] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 17:21 | JAL | |
| Xylenes (Total) [NA] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 17:21 | JAL | |
| | | | | | | | | | | | |
| <u>Surrogates</u> | <u>Results</u> | <u>DF</u> | <u>Spike Lvl</u> | <u>% Rec</u> | <u>% Rec Limits</u> | <u>Batch</u> | <u>Method</u> | <u>Analyzed</u> | <u>By</u> | <u>Notes</u> | |
| 4-Bromofluorobenzene | 52 | 1 | 50.0 | 105 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 17:21 | JAL | | |
| Dibromofluoromethane | 53 | 1 | 50.0 | 107 % | 70-135 | 8D30017 | EPA 8260B | 04/30/08 17:21 | JAL | | |
| Toluene-d8 | 55 | 1 | 50.0 | 109 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 17:21 | JAL | | |



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Description: MPT-08-MW12S-0408

Lab Sample ID: B802812-04

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/23/08 13:50

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| <u>Analyte [CAS Number]</u> | <u>Results</u> | <u>Flag</u> | <u>Units</u> | <u>DF</u> | <u>MDL</u> | <u>PQL</u> | <u>Batch</u> | <u>Method</u> | <u>Analyzed</u> | <u>By</u> | <u>Notes</u> |
|-------------------------------------|----------------|-------------|--------------|-----------|------------|------------|--------------|---------------|-----------------|-----------|--------------|
| 1-Methylnaphthalene [90-12-0] | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| 2-Methylnaphthalene [91-57-6] ^ | 0.03 | U | ug/L | 1 | 0.03 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Acenaphthene [83-32-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Acenaphthylene [208-96-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Anthracene [120-12-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Benzo(a)anthracene [56-55-3] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Benzo(a)pyrene [50-32-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Benzo(b)fluoranthene [205-99-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Benzo(g,h,i)perylene [191-24-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Benzo(k)fluoranthene [207-08-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Chrysene [218-01-9] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Dibenzo(a,h)anthracene [53-70-3] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Fluoranthene [206-44-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Fluorene [86-73-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Indeno(1,2,3-cd)pyrene [193-39-5] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Naphthalene [91-20-3] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Phenanthrene [85-01-8] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |
| Pyrene [129-00-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |

| <u>Surrogates</u> | <u>Results</u> | <u>DF</u> | <u>Spike Lvl</u> | <u>% Rec</u> | <u>% Rec Limits</u> | <u>Batch</u> | <u>Method</u> | <u>Analyzed</u> | <u>By</u> | <u>Notes</u> |
|-------------------|----------------|-----------|------------------|--------------|---------------------|--------------|---------------|-----------------|-----------|--------------|
| p-Terphenyl | 4.2 | 1 | 5.00 | 84 % | 53-132 | 8D28003 | EPA 8270C | 04/29/08 00:19 | PL | |



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Description: MPT-08-MW12S-0408

Lab Sample ID: B802812-04

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/23/08 13:50

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|----------------------|----------------|-----------|------------------|--------------|---------------------|--------------|---------------|-----------------|----------------|--------------|-------|
| TPH (C8-C40) [NA] ^ | 0.057 | I | mg/L | 1 | 0.042 | 0.170 | 8D28004 | FLPRO | 04/28/08 18:55 | PL | |
| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes | |
| n-Nonatriacontane | 0.0410 | 1 | 0.0500 | 82 % | 37-189 | 8D28004 | FLPRO | 04/28/08 18:55 | PL | | |
| o-Terphenyl | 0.0884 | 1 | 0.100 | 88 % | 68-118 | 8D28004 | FLPRO | 04/28/08 18:55 | PL | | |



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Description: MPT-09-MW01S-0408

Lab Sample ID: B802812-05

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/23/08 15:00

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|---------------------------------------|---------|------|-------|----|------|-----|---------|-----------|----------------|-----|-------|
| Benzene [71-43-2] ^ | 0.23 | U | ug/L | 1 | 0.23 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 17:54 | JAL | |
| Ethylbenzene [100-41-4] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 17:54 | JAL | |
| Methyl-tert-Butyl Ether [1634-04-4] ^ | 0.21 | U | ug/L | 1 | 0.21 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 17:54 | JAL | |
| Toluene [108-88-3] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 17:54 | JAL | |
| Xylenes (Total) [NA] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 17:54 | JAL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|----------------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|-----|-------|
| 4-Bromofluorobenzene | 54 | 1 | 50.0 | 107 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 17:54 | JAL | |
| Dibromofluoromethane | 54 | 1 | 50.0 | 108 % | 70-135 | 8D30017 | EPA 8260B | 04/30/08 17:54 | JAL | |
| Toluene-d8 | 55 | 1 | 50.0 | 109 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 17:54 | JAL | |



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Description: MPT-09-MW01S-0408

Lab Sample ID: B802812-05

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/23/08 15:00

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|-------------------------------------|---------|------|-------|----|------|------|---------|-----------|----------------|----|-------|
| 1-Methylnaphthalene [90-12-0] | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| 2-Methylnaphthalene [91-57-6] ^ | 0.03 | U | ug/L | 1 | 0.03 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Acenaphthene [83-32-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Acenaphthylene [208-96-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Anthracene [120-12-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Benzo(a)anthracene [56-55-3] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Benzo(a)pyrene [50-32-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Benzo(b)fluoranthene [205-99-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Benzo(g,h,i)perylene [191-24-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Benzo(k)fluoranthene [207-08-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Chrysene [218-01-9] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Dibenzo(a,h)anthracene [53-70-3] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Fluoranthene [206-44-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Fluorene [86-73-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Indeno(1,2,3-cd)pyrene [193-39-5] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Naphthalene [91-20-3] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Phenanthrene [85-01-8] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |
| Pyrene [129-00-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|-------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|----|-------|
| p-Terphenyl | 4.3 | 1 | 5.00 | 86 % | 53-132 | 8D28003 | EPA 8270C | 04/29/08 00:40 | PL | |



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Description: MPT-09-MW01S-0408

Lab Sample ID: B802812-05

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/23/08 15:00

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|----------------------|----------------|-----------|------------------|--------------|---------------------|--------------|---------------|-----------------|----------------|--------------|-------|
| TPH (C8-C40) [NA] ^ | 0.056 | I | mg/L | 1 | 0.042 | 0.170 | 8D28004 | FLPRO | 04/28/08 19:19 | PL | |
| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes | |
| n-Nonatriacontane | 0.0448 | 1 | 0.0500 | 90 % | 37-189 | 8D28004 | FLPRO | 04/28/08 19:19 | PL | | |
| o-Terphenyl | 0.0942 | 1 | 0.100 | 94 % | 68-118 | 8D28004 | FLPRO | 04/28/08 19:19 | PL | | |



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Description: MPT-FF-MW07-0408

Lab Sample ID: B802812-06

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/24/08 10:40

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|---------------------------------------|---------|------|-------|----|------|-----|---------|-----------|----------------|-----|-------|
| Benzene [71-43-2] ^ | 0.23 | U | ug/L | 1 | 0.23 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 18:27 | JAL | |
| Ethylbenzene [100-41-4] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 18:27 | JAL | |
| Methyl-tert-Butyl Ether [1634-04-4] ^ | 0.21 | U | ug/L | 1 | 0.21 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 18:27 | JAL | |
| Toluene [108-88-3] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 18:27 | JAL | |
| Xylenes (Total) [NA] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 18:27 | JAL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|----------------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|-----|-------|
| 4-Bromofluorobenzene | 54 | 1 | 50.0 | 108 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 18:27 | JAL | |
| Dibromofluoromethane | 54 | 1 | 50.0 | 108 % | 70-135 | 8D30017 | EPA 8260B | 04/30/08 18:27 | JAL | |
| Toluene-d8 | 55 | 1 | 50.0 | 110 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 18:27 | JAL | |



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Description: MPT-FF-MW07-0408

Lab Sample ID: B802812-06

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/24/08 10:40

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|-------------------------------------|---------|------|-------|----|------|------|---------|-----------|----------------|----|-------|
| 1-Methylnaphthalene [90-12-0] | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| 2-Methylnaphthalene [91-57-6] ^ | 0.03 | U | ug/L | 1 | 0.03 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Acenaphthene [83-32-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Acenaphthylene [208-96-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Anthracene [120-12-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Benzo(a)anthracene [56-55-3] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Benzo(a)pyrene [50-32-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Benzo(b)fluoranthene [205-99-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Benzo(g,h,i)perylene [191-24-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Benzo(k)fluoranthene [207-08-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Chrysene [218-01-9] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Dibenzo(a,h)anthracene [53-70-3] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Fluoranthene [206-44-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Fluorene [86-73-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Indeno(1,2,3-cd)pyrene [193-39-5] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Naphthalene [91-20-3] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Phenanthrene [85-01-8] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |
| Pyrene [129-00-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|-------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|----|-------|
| p-Terphenyl | 4.1 | 1 | 5.00 | 82 % | 53-132 | 8D28003 | EPA 8270C | 04/29/08 01:01 | PL | |



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Description: MPT-FF-MW07-0408

Lab Sample ID: B802812-06

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/24/08 10:40

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| <u>Analyte [CAS Number]</u> | <u>Results</u> | <u>Flag</u> | <u>Units</u> | <u>DF</u> | <u>MDL</u> | <u>PQL</u> | <u>Batch</u> | <u>Method</u> | <u>Analyzed</u> | <u>By</u> | <u>Notes</u> |
|-----------------------------|----------------|-------------|------------------|--------------|---------------------|--------------|---------------|-----------------|-----------------|--------------|--------------|
| TPH (C8-C40) [NA] ^ | 0.050 | I | mg/L | 1 | 0.042 | 0.170 | 8D28004 | FLPRO | 04/28/08 20:28 | PL | |
| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes | |
| n-Nonatriacontane | 0.0447 | 1 | 0.0500 | 89 % | 37-189 | 8D28004 | FLPRO | 04/28/08 20:28 | PL | | |
| o-Terphenyl | 0.0894 | 1 | 0.100 | 89 % | 68-118 | 8D28004 | FLPRO | 04/28/08 20:28 | PL | | |



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Description: MPT-16-MW03S-0408MS/MSD

Lab Sample ID: B802812-07

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/24/08 11:29

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|---------------------------------------|---------|------|-------|----|------|-----|---------|-----------|----------------|-----|-------|
| Benzene [71-43-2] ^ | 0.23 | U | ug/L | 1 | 0.23 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 15:08 | JAL | |
| Ethylbenzene [100-41-4] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 15:08 | JAL | |
| Methyl-tert-Butyl Ether [1634-04-4] ^ | 0.21 | U | ug/L | 1 | 0.21 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 15:08 | JAL | |
| Toluene [108-88-3] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 15:08 | JAL | |
| Xylenes (Total) [NA] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 15:08 | JAL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|----------------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|-----|-------|
| 4-Bromofluorobenzene | 53 | 1 | 50.0 | 106 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 15:08 | JAL | |
| Dibromofluoromethane | 55 | 1 | 50.0 | 109 % | 70-135 | 8D30017 | EPA 8260B | 04/30/08 15:08 | JAL | |
| Toluene-d8 | 55 | 1 | 50.0 | 109 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 15:08 | JAL | |



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Description: MPT-16-MW03S-0408MS/MSD

Lab Sample ID: B802812-07

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/24/08 11:29

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|-------------------------------------|---------|------|-------|----|------|------|---------|-----------|----------------|----|-------|
| 1-Methylnaphthalene [90-12-0] | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| 2-Methylnaphthalene [91-57-6] ^ | 0.03 | U | ug/L | 1 | 0.03 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Acenaphthene [83-32-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Acenaphthylene [208-96-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Anthracene [120-12-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Benzo(a)anthracene [56-55-3] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Benzo(a)pyrene [50-32-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Benzo(b)fluoranthene [205-99-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Benzo(g,h,i)perylene [191-24-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Benzo(k)fluoranthene [207-08-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Chrysene [218-01-9] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Dibenzo(a,h)anthracene [53-70-3] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Fluoranthene [206-44-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Fluorene [86-73-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Indeno(1,2,3-cd)pyrene [193-39-5] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Naphthalene [91-20-3] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Phenanthrene [85-01-8] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |
| Pyrene [129-00-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|-------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|----|-------|
| p-Terphenyl | 4.1 | 1 | 5.00 | 83 % | 53-132 | 8D28003 | EPA 8270C | 04/29/08 01:22 | PL | |



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Description: MPT-16-MW03S-0408MS/MSD

Lab Sample ID: B802812-07

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/24/08 11:29

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| <u>Analyte [CAS Number]</u> | <u>Results</u> | <u>Flag</u> | <u>Units</u> | <u>DF</u> | <u>MDL</u> | <u>PQL</u> | <u>Batch</u> | <u>Method</u> | <u>Analyzed</u> | <u>By</u> | <u>Notes</u> |
|-----------------------------|----------------|-------------|------------------|--------------|---------------------|--------------|---------------|-----------------|-----------------|--------------|--------------|
| TPH (C8-C40) [NA] ^ | 0.059 | I | mg/L | 1 | 0.042 | 0.170 | 8D28004 | FLPRO | 04/28/08 18:32 | PL | |
| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes | |
| n-Nonatriacontane | 0.0423 | 1 | 0.0500 | 85 % | 37-189 | 8D28004 | FLPRO | 04/28/08 18:32 | PL | | |
| o-Terphenyl | 0.0919 | 1 | 0.100 | 92 % | 68-118 | 8D28004 | FLPRO | 04/28/08 18:32 | PL | | |



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Description: MPT-FF-MW08-0408

Lab Sample ID: B802812-08

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/24/08 11:34

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|---------------------------------------|---------|------|-------|----|------|-----|---------|-----------|----------------|-----|-------|
| Benzene [71-43-2] ^ | 0.23 | U | ug/L | 1 | 0.23 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 19:00 | JAL | |
| Ethylbenzene [100-41-4] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 19:00 | JAL | |
| Methyl-tert-Butyl Ether [1634-04-4] ^ | 0.21 | U | ug/L | 1 | 0.21 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 19:00 | JAL | |
| Toluene [108-88-3] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 19:00 | JAL | |
| Xylenes (Total) [NA] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 19:00 | JAL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|----------------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|-----|-------|
| 4-Bromofluorobenzene | 53 | 1 | 50.0 | 105 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 19:00 | JAL | |
| Dibromofluoromethane | 55 | 1 | 50.0 | 109 % | 70-135 | 8D30017 | EPA 8260B | 04/30/08 19:00 | JAL | |
| Toluene-d8 | 55 | 1 | 50.0 | 109 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 19:00 | JAL | |



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Description: MPT-FF-MW08-0408

Matrix: Ground Water

Project: Mayport Fuel Farm

Lab Sample ID: B802812-08

Sampled: 04/24/08 11:34

Sampled By: Joe Gibson

Received: 04/24/08 16:44

Work Order: B802812

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| <u>Analyte [CAS Number]</u> | <u>Results</u> | <u>Flag</u> | <u>Units</u> | <u>DF</u> | <u>MDL</u> | <u>PQL</u> | <u>Batch</u> | <u>Method</u> | <u>Analyzed</u> | <u>By</u> | <u>Notes</u> |
|-------------------------------------|----------------|-------------|--------------|-----------|------------|------------|--------------|---------------|-----------------|-----------|--------------|
| 1-Methylnaphthalene [90-12-0] | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| 2-Methylnaphthalene [91-57-6] ^ | 0.03 | U | ug/L | 1 | 0.03 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Acenaphthene [83-32-9] ^ | 0.03 | I | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Acenaphthylene [208-96-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Anthracene [120-12-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Benzo(a)anthracene [56-55-3] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Benzo(a)pyrene [50-32-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Benzo(b)fluoranthene [205-99-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Benzo(g,h,i)perylene [191-24-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Benzo(k)fluoranthene [207-08-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Chrysene [218-01-9] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Dibenzo(a,h)anthracene [53-70-3] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Fluoranthene [206-44-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Fluorene [86-73-7] ^ | 0.03 | I | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Indeno(1,2,3-cd)pyrene [193-39-5] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Naphthalene [91-20-3] ^ | 0.04 | I | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Phenanthrene [85-01-8] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |
| Pyrene [129-00-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |

| <u>Surrogates</u> | <u>Results</u> | <u>DF</u> | <u>Spike Lvl</u> | <u>% Rec</u> | <u>% Rec Limits</u> | <u>Batch</u> | <u>Method</u> | <u>Analyzed</u> | <u>By</u> | <u>Notes</u> |
|-------------------|----------------|-----------|------------------|--------------|---------------------|--------------|---------------|-----------------|-----------|--------------|
| p-Terphenyl | 4.0 | 1 | 5.00 | 81 % | 53-132 | 8D28003 | EPA 8270C | 04/29/08 01:43 | PL | |



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Description: MPT-FF-MW08-0408

Matrix: Ground Water

Project: Mayport Fuel Farm

Lab Sample ID: B802812-08

Sampled: 04/24/08 11:34

Sampled By: Joe Gibson

Received: 04/24/08 16:44

Work Order: B802812

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|----------------------|----------------|-----------|------------------|--------------|---------------------|--------------|---------------|-----------------|----------------|--------------|-------|
| TPH (C8-C40) [NA] ^ | 0.155 | I | mg/L | 1 | 0.042 | 0.170 | 8D28004 | FLPRO | 04/28/08 20:51 | PL | |
| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes | |
| n-Nonatriacontane | 0.0461 | 1 | 0.0500 | 92 % | 37-189 | 8D28004 | FLPRO | 04/28/08 20:51 | PL | | |
| o-Terphenyl | 0.0868 | 1 | 0.100 | 87 % | 68-118 | 8D28004 | FLPRO | 04/28/08 20:51 | PL | | |



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Description: MPT-09-MW02S-0408

Lab Sample ID: B802812-09

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/24/08 12:54

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|---------------------------------------|---------|------|-------|----|------|-----|---------|-----------|----------------|-----|-------|
| Benzene [71-43-2] ^ | 0.23 | U | ug/L | 1 | 0.23 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 19:33 | JAL | |
| Ethylbenzene [100-41-4] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 19:33 | JAL | |
| Methyl-tert-Butyl Ether [1634-04-4] ^ | 0.21 | U | ug/L | 1 | 0.21 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 19:33 | JAL | |
| Toluene [108-88-3] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 19:33 | JAL | |
| Xylenes (Total) [NA] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 19:33 | JAL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|----------------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|-----|-------|
| 4-Bromofluorobenzene | 52 | 1 | 50.0 | 105 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 19:33 | JAL | |
| Dibromofluoromethane | 54 | 1 | 50.0 | 108 % | 70-135 | 8D30017 | EPA 8260B | 04/30/08 19:33 | JAL | |
| Toluene-d8 | 54 | 1 | 50.0 | 109 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 19:33 | JAL | |



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Description: MPT-09-MW02S-0408

Lab Sample ID: B802812-09

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/24/08 12:54

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|--------------------------------------|-------------|------|-------|----|------|------|---------|-----------|----------------|----|-------|
| 1-Methylnaphthalene [90-12-0] | 0.13 | | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| 2-Methylnaphthalene [91-57-6] ^ | 0.03 | U | ug/L | 1 | 0.03 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Acenaphthene [83-32-9] ^ | 0.08 | I | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Acenaphthylene [208-96-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Anthracene [120-12-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Benzo(a)anthracene [56-55-3] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Benzo(a)pyrene [50-32-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Benzo(b)fluoranthene [205-99-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Benzo(g,h,i)perylene [191-24-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Benzo(k)fluoranthene [207-08-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Chrysene [218-01-9] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Dibenzo(a,h)anthracene [53-70-3] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Fluoranthene [206-44-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Fluorene [86-73-7] ^ | 0.08 | I | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Indeno(1,2,3-cd)pyrene [193-39-5] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Naphthalene [91-20-3] ^ | 0.10 | I | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Phenanthrene [85-01-8] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |
| Pyrene [129-00-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|-------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|----|-------|
| p-Terphenyl | 3.7 | 1 | 5.00 | 74 % | 53-132 | 8D28003 | EPA 8270C | 04/29/08 02:04 | PL | |



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Description: MPT-09-MW02S-0408

Matrix: Ground Water

Project: Mayport Fuel Farm

Lab Sample ID: B802812-09

Sampled: 04/24/08 12:54

Sampled By: Joe Gibson

Received: 04/24/08 16:44

Work Order: B802812

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|----------------------|----------------|-----------|------------------|--------------|---------------------|--------------|---------------|-----------------|----------------|--------------|-------|
| TPH (C8-C40) [NA] ^ | 0.962 | | mg/L | 1 | 0.042 | 0.170 | 8D28004 | FLPRO | 04/28/08 21:14 | PL | |
| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes | |
| n-Nonatriacontane | 0.0468 | 1 | 0.0500 | 94 % | 37-189 | 8D28004 | FLPRO | 04/28/08 21:14 | PL | | |
| o-Terphenyl | 0.0905 | 1 | 0.100 | 91 % | 68-118 | 8D28004 | FLPRO | 04/28/08 21:14 | PL | | |



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Description: MPT-09-MW03S-0408

Lab Sample ID: B802812-10

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/24/08 13:47

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|---------------------------------------|---------|------|-------|----|------|-----|---------|-----------|----------------|-----|-------|
| Benzene [71-43-2] ^ | 0.23 | U | ug/L | 1 | 0.23 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 20:06 | JAL | |
| Ethylbenzene [100-41-4] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 20:06 | JAL | |
| Methyl-tert-Butyl Ether [1634-04-4] ^ | 0.21 | U | ug/L | 1 | 0.21 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 20:06 | JAL | |
| Toluene [108-88-3] ^ | 0.28 | U | ug/L | 1 | 0.28 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 20:06 | JAL | |
| Xylenes (Total) [NA] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 20:06 | JAL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|----------------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|-----|-------|
| 4-Bromofluorobenzene | 54 | 1 | 50.0 | 107 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 20:06 | JAL | |
| Dibromofluoromethane | 54 | 1 | 50.0 | 108 % | 70-135 | 8D30017 | EPA 8260B | 04/30/08 20:06 | JAL | |
| Toluene-d8 | 55 | 1 | 50.0 | 109 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 20:06 | JAL | |



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Description: MPT-09-MW03S-0408

Lab Sample ID: B802812-10

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/24/08 13:47

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|-------------------------------------|---------|------|-------|----|------|------|---------|-----------|----------------|----|-------|
| 1-Methylnaphthalene [90-12-0] | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| 2-Methylnaphthalene [91-57-6] ^ | 0.03 | U | ug/L | 1 | 0.03 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Acenaphthene [83-32-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Acenaphthylene [208-96-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Anthracene [120-12-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Benzo(a)anthracene [56-55-3] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Benzo(a)pyrene [50-32-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Benzo(b)fluoranthene [205-99-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Benzo(g,h,i)perylene [191-24-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Benzo(k)fluoranthene [207-08-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Chrysene [218-01-9] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Dibenzo(a,h)anthracene [53-70-3] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Fluoranthene [206-44-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Fluorene [86-73-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Indeno(1,2,3-cd)pyrene [193-39-5] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Naphthalene [91-20-3] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Phenanthrene [85-01-8] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |
| Pyrene [129-00-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|-------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|----|-------|
| p-Terphenyl | 4.2 | 1 | 5.00 | 83 % | 53-132 | 8D28003 | EPA 8270C | 04/29/08 02:25 | PL | |



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Description: MPT-09-MW03S-0408

Lab Sample ID: B802812-10

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/24/08 13:47

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| <u>Analyte [CAS Number]</u> | <u>Results</u> | <u>Flag</u> | <u>Units</u> | <u>DF</u> | <u>MDL</u> | <u>PQL</u> | <u>Batch</u> | <u>Method</u> | <u>Analyzed</u> | <u>By</u> | <u>Notes</u> |
|-----------------------------|----------------|-------------|------------------|--------------|---------------------|--------------|---------------|-----------------|-----------------|--------------|--------------|
| TPH (C8-C40) [NA] ^ | 0.103 | I | mg/L | 1 | 0.042 | 0.170 | 8D28004 | FLPRO | 04/28/08 21:37 | PL | |
| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes | |
| n-Nonatriacontane | 0.0553 | 1 | 0.0500 | 111 % | 37-189 | 8D28004 | FLPRO | 04/28/08 21:37 | PL | | |
| o-Terphenyl | 0.108 | 1 | 0.100 | 108 % | 68-118 | 8D28004 | FLPRO | 04/28/08 21:37 | PL | | |



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Description: MPT-16-FB1-0408

Matrix: Ground Water

Project: Mayport Fuel Farm

Lab Sample ID: B802812-11

Sampled: 04/24/08 14:35

Sampled By: Joe Gibson

Received: 04/24/08 16:44

Work Order: B802812

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|---------------------------------------|-------------|----------|-------|----|------|-----|---------|-----------|----------------|-----|-------|
| Benzene [71-43-2] ^ | 0.23 | U | ug/L | 1 | 0.23 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 20:39 | JAL | |
| Ethylbenzene [100-41-4] ^ | 0.34 | U | ug/L | 1 | 0.34 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 20:39 | JAL | |
| Methyl-tert-Butyl Ether [1634-04-4] ^ | 0.21 | U | ug/L | 1 | 0.21 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 20:39 | JAL | |
| Toluene [108-88-3] ^ | 0.34 | I | ug/L | 1 | 0.28 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 20:39 | JAL | |
| Xylenes (Total) [NA] ^ | 0.38 | U | ug/L | 1 | 0.38 | 1.0 | 8D30017 | EPA 8260B | 04/30/08 20:39 | JAL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|----------------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|-----|-------|
| 4-Bromofluorobenzene | 53 | 1 | 50.0 | 106 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 20:39 | JAL | |
| Dibromofluoromethane | 55 | 1 | 50.0 | 110 % | 70-135 | 8D30017 | EPA 8260B | 04/30/08 20:39 | JAL | |
| Toluene-d8 | 55 | 1 | 50.0 | 109 % | 80-120 | 8D30017 | EPA 8260B | 04/30/08 20:39 | JAL | |



www.encolabs.com

Description: MPT-16-FB1-0408

Lab Sample ID: B802812-11

Received: 04/24/08 16:44

Matrix: Ground Water

Sampled: 04/24/08 14:35

Work Order: B802812

Project: Mayport Fuel Farm

Sampled By: Joe Gibson

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|-------------------------------------|-------------|----------|-------|----|------|------|---------|-----------|----------------|----|-------|
| 1-Methylnaphthalene [90-12-0] | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| 2-Methylnaphthalene [91-57-6] ^ | 0.03 | U | ug/L | 1 | 0.03 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Acenaphthene [83-32-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Acenaphthylene [208-96-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Anthracene [120-12-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Benzo(a)anthracene [56-55-3] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Benzo(a)pyrene [50-32-8] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Benzo(b)fluoranthene [205-99-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Benzo(g,h,i)perylene [191-24-2] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Benzo(k)fluoranthene [207-08-9] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Chrysene [218-01-9] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Dibenzo(a,h)anthracene [53-70-3] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Fluoranthene [206-44-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Fluorene [86-73-7] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Indeno(1,2,3-cd)pyrene [193-39-5] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Naphthalene [91-20-3] ^ | 0.03 | I | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Phenanthrene [85-01-8] ^ | 0.02 | U | ug/L | 1 | 0.02 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |
| Pyrene [129-00-0] ^ | 0.01 | U | ug/L | 1 | 0.01 | 0.10 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |

| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes |
|-------------|---------|----|-----------|-------|--------------|---------|-----------|----------------|----|-------|
| p-Terphenyl | 4.1 | 1 | 5.00 | 82 % | 53-132 | 8D28003 | EPA 8270C | 04/29/08 02:46 | PL | |



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Description: MPT-16-FB1-0408

Matrix: Ground Water

Project: Mayport Fuel Farm

Lab Sample ID: B802812-11

Sampled: 04/24/08 14:35

Sampled By: Joe Gibson

Received: 04/24/08 16:44

Work Order: B802812

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

| Analyte [CAS Number] | Results | Flag | Units | DF | MDL | PQL | Batch | Method | Analyzed | By | Notes |
|----------------------|----------------|-----------|------------------|--------------|---------------------|--------------|---------------|-----------------|----------------|--------------|-------|
| TPH (C8-C40) [NA] ^ | 0.143 | I | mg/L | 1 | 0.042 | 0.170 | 8D28004 | FLPRO | 04/28/08 22:00 | PL | |
| Surrogates | Results | DF | Spike Lvl | % Rec | % Rec Limits | Batch | Method | Analyzed | By | Notes | |
| n-Nonatriacontane | 0.0486 | 1 | 0.0500 | 97 % | 37-189 | 8D28004 | FLPRO | 04/28/08 22:00 | PL | | |
| o-Terphenyl | 0.0940 | 1 | 0.100 | 94 % | 68-118 | 8D28004 | FLPRO | 04/28/08 22:00 | PL | | |

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 8D30017 - EPA 5030B_MS

Blank (8D30017-BLK1)

Prepared: 04/30/2008 09:42 Analyzed: 04/30/2008 12:23

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------------------------------|--------|------|-----|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| Methyl-tert-Butyl Ether | 0.21 | U | 1.0 | ug/L | | | | | | | |
| Benzene | 0.23 | U | 1.0 | ug/L | | | | | | | |
| Toluene | 0.28 | U | 1.0 | ug/L | | | | | | | |
| Ethylbenzene | 0.34 | U | 1.0 | ug/L | | | | | | | |
| Xylenes (Total) | 0.38 | U | 1.0 | ug/L | | | | | | | |
| Surrogate: Dibromofluoromethane | 54 | | | ug/L | 50.0 | | 108 | 70-135 | | | |
| Surrogate: Toluene-d8 | 55 | | | ug/L | 50.0 | | 110 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 53 | | | ug/L | 50.0 | | 107 | 80-120 | | | |

LCS (8D30017-BS1)

Prepared: 04/30/2008 09:42 Analyzed: 04/30/2008 12:56

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------------------------------|--------|------|-----|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| Methyl-tert-Butyl Ether | 17 | | 1.0 | ug/L | 20.0 | | 84 | 67-125 | | | |
| Benzene | 19 | | 1.0 | ug/L | 20.0 | | 95 | 80-130 | | | |
| Toluene | 19 | | 1.0 | ug/L | 20.0 | | 94 | 80-124 | | | |
| Ethylbenzene | 20 | | 1.0 | ug/L | 20.0 | | 99 | 80-127 | | | |
| m,p-Xylenes | 38 | | 2.0 | ug/L | 40.0 | | 96 | 80-132 | | | |
| o-Xylene | 19 | | 1.0 | ug/L | 20.0 | | 96 | 80-120 | | | |
| Surrogate: Dibromofluoromethane | 53 | | | ug/L | 50.0 | | 106 | 70-135 | | | |
| Surrogate: Toluene-d8 | 54 | | | ug/L | 50.0 | | 108 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 55 | | | ug/L | 50.0 | | 110 | 80-120 | | | |

Matrix Spike (8D30017-MS1)

Prepared: 04/30/2008 09:42 Analyzed: 04/30/2008 13:29

Source: B802812-07

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------------------------------|--------|------|-----|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| Methyl-tert-Butyl Ether | 20 | | 1.0 | ug/L | 20.0 | 0.21 U | 100 | 67-125 | | | |
| Benzene | 22 | | 1.0 | ug/L | 20.0 | 0.23 U | 110 | 80-130 | | | |
| Toluene | 22 | | 1.0 | ug/L | 20.0 | 0.28 U | 109 | 80-124 | | | |
| Ethylbenzene | 22 | | 1.0 | ug/L | 20.0 | 0.34 U | 111 | 80-127 | | | |
| m,p-Xylenes | 46 | | 2.0 | ug/L | 40.0 | 0.38 U | 116 | 80-132 | | | |
| o-Xylene | 22 | | 1.0 | ug/L | 20.0 | 0.22 U | 110 | 80-120 | | | |
| Surrogate: Dibromofluoromethane | 55 | | | ug/L | 50.0 | | 109 | 70-135 | | | |
| Surrogate: Toluene-d8 | 54 | | | ug/L | 50.0 | | 109 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 55 | | | ug/L | 50.0 | | 109 | 80-120 | | | |

Matrix Spike Dup (8D30017-MSD1)

Prepared: 04/30/2008 09:42 Analyzed: 04/30/2008 14:02

Source: B802812-07

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-------------------------|--------|------|-----|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| Methyl-tert-Butyl Ether | 19 | | 1.0 | ug/L | 20.0 | 0.21 U | 94 | 67-125 | 6 | 36 | |
| Benzene | 21 | | 1.0 | ug/L | 20.0 | 0.23 U | 105 | 80-130 | 5 | 26 | |
| Toluene | 21 | | 1.0 | ug/L | 20.0 | 0.28 U | 103 | 80-124 | 6 | 26 | |
| Ethylbenzene | 21 | | 1.0 | ug/L | 20.0 | 0.34 U | 106 | 80-127 | 5 | 30 | |
| m,p-Xylenes | 42 | | 2.0 | ug/L | 40.0 | 0.38 U | 104 | 80-132 | 10 | 32 | |
| o-Xylene | 20 | | 1.0 | ug/L | 20.0 | 0.22 U | 102 | 80-120 | 7 | 26 | |

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 8D30017 - EPA 5030B_MS

Matrix Spike Dup (8D30017-MSD1) Continued

Prepared: 04/30/2008 09:42 Analyzed: 04/30/2008 14:02

Source: B802812-07

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------------------------------|--------|------|-----|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| Surrogate: Dibromofluoromethane | 54 | | | ug/L | 50.0 | | 109 | 70-135 | | | |
| Surrogate: Toluene-d8 | 56 | | | ug/L | 50.0 | | 111 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 53 | | | ug/L | 50.0 | | 106 | 80-120 | | | |

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 8D28003 - EPA 3510C_MS

Blank (8D28003-BLK1)

Prepared: 04/28/2008 12:34 Analyzed: 04/28/2008 22:56

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|------------------------|--------|------|------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| Naphthalene | 0.02 | U | 0.10 | ug/L | | | | | | | |
| 2-Methylnaphthalene | 0.03 | U | 0.10 | ug/L | | | | | | | |
| 1-Methylnaphthalene | 0.02 | U | 0.10 | ug/L | | | | | | | |
| Acenaphthylene | 0.01 | U | 0.10 | ug/L | | | | | | | |
| Acenaphthene | 0.02 | U | 0.10 | ug/L | | | | | | | |
| Fluorene | 0.02 | U | 0.10 | ug/L | | | | | | | |
| Phenanthrene | 0.02 | U | 0.10 | ug/L | | | | | | | |
| Anthracene | 0.02 | U | 0.10 | ug/L | | | | | | | |
| Fluoranthene | 0.01 | U | 0.10 | ug/L | | | | | | | |
| Pyrene | 0.01 | U | 0.10 | ug/L | | | | | | | |
| Benzo(a)anthracene | 0.02 | U | 0.10 | ug/L | | | | | | | |
| Chrysene | 0.01 | U | 0.10 | ug/L | | | | | | | |
| Benzo(b)fluoranthene | 0.02 | U | 0.10 | ug/L | | | | | | | |
| Benzo(k)fluoranthene | 0.02 | U | 0.10 | ug/L | | | | | | | |
| Benzo(a)pyrene | 0.01 | U | 0.10 | ug/L | | | | | | | |
| Indeno(1,2,3-cd)pyrene | 0.02 | U | 0.10 | ug/L | | | | | | | |
| Dibenzo(a,h)anthracene | 0.01 | U | 0.10 | ug/L | | | | | | | |
| Benzo(g,h,i)perylene | 0.02 | U | 0.10 | ug/L | | | | | | | |
| Surrogate: p-Terphenyl | 4.6 | | | ug/L | 5.00 | | 92 | 53-132 | | | |

LCS (8D28003-BS1)

Prepared: 04/28/2008 12:34 Analyzed: 04/28/2008 23:17

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|----------------------|--------|------|------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| Naphthalene | 1.3 | | 0.10 | ug/L | 2.00 | | 64 | 44-120 | | | |
| 2-Methylnaphthalene | 1.4 | | 0.10 | ug/L | 2.00 | | 68 | 39-121 | | | |
| 1-Methylnaphthalene | 1.4 | | 0.10 | ug/L | 2.00 | | 69 | 41-120 | | | |
| Acenaphthylene | 1.5 | | 0.10 | ug/L | 2.00 | | 73 | 40-120 | | | |
| Acenaphthene | 1.4 | | 0.10 | ug/L | 2.00 | | 71 | 49-120 | | | |
| Fluorene | 1.6 | | 0.10 | ug/L | 2.00 | | 78 | 49-120 | | | |
| Phenanthrene | 1.5 | | 0.10 | ug/L | 2.00 | | 77 | 56-120 | | | |
| Anthracene | 1.6 | | 0.10 | ug/L | 2.00 | | 78 | 48-120 | | | |
| Fluoranthene | 1.9 | | 0.10 | ug/L | 2.00 | | 95 | 59-128 | | | |
| Pyrene | 1.8 | | 0.10 | ug/L | 2.00 | | 89 | 57-124 | | | |
| Benzo(a)anthracene | 1.6 | | 0.10 | ug/L | 2.00 | | 79 | 53-120 | | | |
| Chrysene | 1.5 | | 0.10 | ug/L | 2.00 | | 74 | 59-128 | | | |
| Benzo(b)fluoranthene | 1.8 | | 0.10 | ug/L | 2.00 | | 90 | 59-120 | | | |

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 8D28003 - EPA 3510C_MS

LCS (8D28003-BS1) Continued

Prepared: 04/28/2008 12:34 Analyzed: 04/28/2008 23:17

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|------------------------|--------|------|------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| Benzo(k)fluoranthene | 1.6 | | 0.10 | ug/L | 2.00 | | 82 | 53-128 | | | |
| Benzo(a)pyrene | 1.7 | | 0.10 | ug/L | 2.00 | | 86 | 44-120 | | | |
| Indeno(1,2,3-cd)pyrene | 1.1 | | 0.10 | ug/L | 2.00 | | 54 | 34-120 | | | |
| Dibenzo(a,h)anthracene | 1.1 | | 0.10 | ug/L | 2.00 | | 56 | 35-122 | | | |
| Benzo(g,h,i)perylene | 0.96 | | 0.10 | ug/L | 2.00 | | 48 | 41-120 | | | |
| Surrogate: p-Terphenyl | 4.4 | | | ug/L | 5.00 | | 89 | 53-132 | | | |

Matrix Spike (8D28003-MS1)

Prepared: 04/28/2008 12:34 Analyzed: 04/28/2008 23:38

Source: B802812-07

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|------------------------|--------|------|------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| Naphthalene | 1.4 | | 0.10 | ug/L | 2.00 | 0.02 U | 68 | 44-120 | | | |
| 2-Methylnaphthalene | 1.4 | | 0.10 | ug/L | 2.00 | 0.03 U | 71 | 39-121 | | | |
| 1-Methylnaphthalene | 1.4 | | 0.10 | ug/L | 2.00 | 0.02 U | 71 | 41-120 | | | |
| Acenaphthylene | 1.5 | | 0.10 | ug/L | 2.00 | 0.01 U | 74 | 40-120 | | | |
| Acenaphthene | 1.4 | | 0.10 | ug/L | 2.00 | 0.02 U | 72 | 49-120 | | | |
| Fluorene | 1.6 | | 0.10 | ug/L | 2.00 | 0.02 U | 80 | 49-120 | | | |
| Phenanthrene | 1.5 | | 0.10 | ug/L | 2.00 | 0.02 U | 77 | 56-120 | | | |
| Anthracene | 1.6 | | 0.10 | ug/L | 2.00 | 0.02 U | 81 | 48-120 | | | |
| Fluoranthene | 1.9 | | 0.10 | ug/L | 2.00 | 0.01 U | 93 | 59-128 | | | |
| Pyrene | 1.8 | | 0.10 | ug/L | 2.00 | 0.01 U | 88 | 57-124 | | | |
| Benzo(a)anthracene | 1.6 | | 0.10 | ug/L | 2.00 | 0.02 U | 78 | 53-120 | | | |
| Chrysene | 1.5 | | 0.10 | ug/L | 2.00 | 0.01 U | 76 | 59-128 | | | |
| Benzo(b)fluoranthene | 1.8 | | 0.10 | ug/L | 2.00 | 0.02 U | 90 | 59-120 | | | |
| Benzo(k)fluoranthene | 1.7 | | 0.10 | ug/L | 2.00 | 0.02 U | 86 | 53-128 | | | |
| Benzo(a)pyrene | 1.7 | | 0.10 | ug/L | 2.00 | 0.01 U | 85 | 44-120 | | | |
| Indeno(1,2,3-cd)pyrene | 1.1 | | 0.10 | ug/L | 2.00 | 0.02 U | 54 | 34-120 | | | |
| Dibenzo(a,h)anthracene | 1.1 | | 0.10 | ug/L | 2.00 | 0.01 U | 56 | 35-122 | | | |
| Benzo(g,h,i)perylene | 0.88 | | 0.10 | ug/L | 2.00 | 0.02 U | 44 | 41-120 | | | |
| Surrogate: p-Terphenyl | 4.3 | | | ug/L | 5.00 | | 87 | 53-132 | | | |

Matrix Spike Dup (8D28003-MSD1)

Prepared: 04/28/2008 12:34 Analyzed: 04/28/2008 23:59

Source: B802812-07

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------------------|--------|------|------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| Naphthalene | 1.4 | | 0.10 | ug/L | 2.00 | 0.02 U | 68 | 44-120 | 0.1 | 31 | |
| 2-Methylnaphthalene | 1.4 | | 0.10 | ug/L | 2.00 | 0.03 U | 69 | 39-121 | 2 | 30 | |
| 1-Methylnaphthalene | 1.4 | | 0.10 | ug/L | 2.00 | 0.02 U | 69 | 41-120 | 3 | 30 | |
| Acenaphthylene | 1.4 | | 0.10 | ug/L | 2.00 | 0.01 U | 71 | 40-120 | 5 | 21 | |
| Acenaphthene | 1.4 | | 0.10 | ug/L | 2.00 | 0.02 U | 70 | 49-120 | 4 | 24 | |
| Fluorene | 1.5 | | 0.10 | ug/L | 2.00 | 0.02 U | 76 | 49-120 | 5 | 19 | |
| Phenanthrene | 1.5 | | 0.10 | ug/L | 2.00 | 0.02 U | 74 | 56-120 | 4 | 14 | |
| Anthracene | 1.6 | | 0.10 | ug/L | 2.00 | 0.02 U | 79 | 48-120 | 3 | 13 | |
| Fluoranthene | 1.8 | | 0.10 | ug/L | 2.00 | 0.01 U | 88 | 59-128 | 5 | 10 | |
| Pyrene | 1.7 | | 0.10 | ug/L | 2.00 | 0.01 U | 83 | 57-124 | 6 | 10 | |
| Benzo(a)anthracene | 1.5 | | 0.10 | ug/L | 2.00 | 0.02 U | 76 | 53-120 | 3 | 11 | |
| Chrysene | 1.4 | | 0.10 | ug/L | 2.00 | 0.01 U | 72 | 59-128 | 5 | 10 | |

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 8D28003 - EPA 3510C_MS

Matrix Spike Dup (8D28003-MSD1) Continued

Prepared: 04/28/2008 12:34 Analyzed: 04/28/2008 23:59

Source: B802812-07

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|------------------------|--------|------|------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| Benzo(b)fluoranthene | 1.7 | | 0.10 | ug/L | 2.00 | 0.02 U | 85 | 59-120 | 6 | 17 | |
| Benzo(k)fluoranthene | 1.6 | | 0.10 | ug/L | 2.00 | 0.02 U | 81 | 53-128 | 6 | 13 | |
| Benzo(a)pyrene | 1.6 | | 0.10 | ug/L | 2.00 | 0.01 U | 82 | 44-120 | 4 | 12 | |
| Indeno(1,2,3-cd)pyrene | 1.1 | | 0.10 | ug/L | 2.00 | 0.02 U | 54 | 34-120 | 0.6 | 13 | |
| Dibenzo(a,h)anthracene | 1.1 | | 0.10 | ug/L | 2.00 | 0.01 U | 54 | 35-122 | 3 | 19 | |
| Benzo(g,h,i)perylene | 0.88 | | 0.10 | ug/L | 2.00 | 0.02 U | 44 | 41-120 | 0.3 | 16 | |
| Surrogate: p-Terphenyl | 4.1 | | | ug/L | 5.00 | | 83 | 53-132 | | | |

FL Petroleum Range Organics - Quality Control

Batch 8D28004 - EPA 3510C

Blank (8D28004-BLK1)

Prepared: 04/28/2008 12:36 Analyzed: 04/28/2008 16:58

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|------------------------------|--------|------|-------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| TPH (C8-C40) | 0.042 | U | 0.170 | mg/L | | | | | | | |
| Surrogate: n-Nonatriacontane | 0.0300 | | | mg/L | 0.0500 | | 60 | 37-189 | | | |
| Surrogate: o-Terphenyl | 0.0885 | | | mg/L | 0.100 | | 88 | 68-118 | | | |

LCS (8D28004-BS1)

Prepared: 04/28/2008 12:36 Analyzed: 04/28/2008 17:22

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|------------------------------|--------|------|-------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| TPH (C8-C40) | 1.79 | | 0.170 | mg/L | 1.70 | | 105 | 55-118 | | | |
| Surrogate: n-Nonatriacontane | 0.0481 | | | mg/L | 0.0500 | | 96 | 42-193 | | | |
| Surrogate: o-Terphenyl | 0.0972 | | | mg/L | 0.100 | | 97 | 82-142 | | | |

Matrix Spike (8D28004-MS1)

Prepared: 04/28/2008 12:36 Analyzed: 04/28/2008 17:45

Source: B802812-07

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|------------------------------|--------|------|-------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| TPH (C8-C40) | 1.63 | | 0.170 | mg/L | 1.70 | 0.0592 | 93 | 65-126 | | | |
| Surrogate: n-Nonatriacontane | 0.0440 | | | mg/L | 0.0500 | | 88 | 37-189 | | | |
| Surrogate: o-Terphenyl | 0.0886 | | | mg/L | 0.100 | | 89 | 68-118 | | | |

Matrix Spike Dup (8D28004-MSD1)

Prepared: 04/28/2008 12:36 Analyzed: 04/28/2008 18:08

Source: B802812-07

| Analyte | Result | Flag | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|------------------------------|--------|------|-------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| TPH (C8-C40) | 1.76 | | 0.170 | mg/L | 1.70 | 0.0592 | 100 | 65-126 | 8 | 15 | |
| Surrogate: n-Nonatriacontane | 0.0491 | | | mg/L | 0.0500 | | 98 | 37-189 | | | |
| Surrogate: o-Terphenyl | 0.0938 | | | mg/L | 0.100 | | 94 | 68-118 | | | |

FLAGS/NOTES AND DEFINITIONS

| | |
|-----|---|
| PQL | PQL: Practical Quantitation Limit. |
| B | Results are based upon membrane filter colony counts that are outside the method indicated ideal range. |
| I | The reported value is between the laboratory method detection limit (MDL) and the practical quantitation limit (PQL). |
| J | Estimated value. The associated sample note or project narrative indicate the causative reason. |
| K | Off-scale low; Actual value is known to be less than the value given. |
| L | Off-scale high; Actual value is known to be greater than value given. |
| M | Presence of analyte is verified but not quantified; the actual value is less than the MRL but greater than the MDL. |
| N | Presumptive evidence of presence of material. |
| O | Sampled, but analysis lost or not performed. |
| Q | Sample exceeded the accepted holding time. |
| T | Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis. |
| U | Indicates that the compound was analyzed for but not detected. |
| V | Indicates that the analyte was detected in both the sample and the associated method blank. |
| Y | The laboratory analysis was from an improperly preserved sample. The data may not be accurate. |
| Z | Too many colonies were present (TNTC); the numeric value represents the filtration volume. |
| ? | Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data. |
| * | Not reported due to interference. |



TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER

26342

PAGE 1 OF 1

| | | | | |
|--|-----------------------------|---------------------------------------|--------------------------------|--|
| PROJECT NO: 1126-00412 | FACILITY: Mayport - FBIF | PROJECT MANAGER Mark Peterson | PHONE NUMBER (904) 636-6125 | LABORATORY NAME AND CONTACT: ENCO |
| SAMPLERS (SIGNATURE) Joe Gibson | | FIELD OPERATIONS LEADER Joe Gibson | PHONE NUMBER (904) 636-6125 | ADDRESS 4810 Executive Park Ct. St. 211 |
| | | CARRIER/BILL NUMBER Drop off | | CITY, STATE Jacksonville, FL 32216 |

| | |
|--|-------------|
| STANDARD TAT <input checked="" type="checkbox"/> | LOCATION ID |
| RUSH TAT <input type="checkbox"/> | |
| <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day | |

| DATE YEAR | TIME | SAMPLE ID | TOP DEPTH (FT) | MATRIX (GW, SO, SW, SD, OC, ETC) | COLLECTION METHOD GRAV (G) COMP (C) | NO. OF CONTAINERS | CONTAINER TYPE PLASTIC (P) or GLASS (G) | PRESERVATIVE USED | TYPE OF ANALYSIS | COMMENTS |
|--------------|------|-----------------------|----------------|-------------------------------------|---|-------------------|--|----------------------|--|-----------------|
| 4/23/08 | 1129 | MPT-FF-Tripblant | | QC | GC | 3 | X | | STRAIGHT PAH (81702) HCL TRPH (FL-PRO) | Cool to 4°C |
| " | 1350 | MPT-08-MW125-0408 | | GW | GC | 6 | X | | | |
| " | 1500 | MPT-09-MW015-0408 | | GW | GC | 6 | X | | | |
| 4/24 | 1040 | MPT-FF-MW07-0408 | | GW | GC | 6 | X | | | |
| " | 1129 | MPT-16-MW035-0408 | | GW | GC | 6 | X | | | |
| " | 1129 | MPT-16-MW035-0408-MS | | GC | GC | 6 | X | | | MS |
| " | 1129 | MPT-16-MW035-0408-MSD | | QC | GC | 6 | X | | | MSD |
| " | 1134 | MPT-FF-MW08-0408 | | GW | GC | 6 | X | | | |
| " | 1251 | MPT-09-MW025-0408 | | GW | GC | 6 | X | | | |
| " | 1347 | MPT-09-MW035-0408 | | GW | GC | 6 | X | | | |
| " | 1435 | MPT-16-FB1-0408 | | QC | GC | 6 | X | | | Job # CTO 31 |

| | | | | | |
|----------------------------------|-----------------|--------------|-------------------------------|-----------------|--------------|
| 1. RELINQUISHED BY Joe Gibson | DATE 4/24/08 | TIME 1644 | 1. RECEIVED BY [Signature] | DATE 4/24/08 | TIME 1644 |
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY | DATE | TIME |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY | DATE | TIME |

| |
|--|
| COMMENTS 2199 2.6°C (LBS 1.9°C) |
| DISTRIBUTION WHITE (ACCOMPANIES SAMPLE) |
| YELLOW (FIELD COPY) |
| PINK (FILE COPY) |

FORM NO. TINUS-001



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APPENDIX D

FIELD FORMS



EQUIPMENT CALIBRATION LOG

PROJECT NAME :

INSTRUMENT NAME/MODEL:

SITE NAME: _____

MANUFACTURER:

PROJECT No.: _____

SERIAL NUMBER: _____

[illegible]



GROUNDWATER SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: _____

Project No.: _____

- ☐ Domestic Well Data
☐ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

Sample ID No.: _____

Sample Location: _____

Sampled By: _____

C.O.C. No.: _____

Type of Sample: _____

☐ Low Concentration☐ High Concentration

SAMPLING DATA:

| Date: | Color | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---------|----------|--------|---------|-------|-----------|--------|----------|-------|
| Time: | (Visual) | (S.U.) | (mS/cm) | (°C) | (NTU) | (mg/l) | (%) | |
| Method: | | | | | | | | |

PURGE DATA:

| Date: | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---------------------------------|--------|----|------|-------|-----------|----|----------|-------|
| Method: | | | | | | | | |
| Monitor Reading (ppm): | | | | | | | | |
| Well Casing Diameter & Material | | | | | | | | |
| Type: | | | | | | | | |
| Total Well Depth (TD): | | | | | | | | |
| Static Water Level (WL): | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

SAMPLE COLLECTION INFORMATION:

| Analysis | Preservative | Container Requirements | Collected |
|----------|--------------|------------------------|-----------|
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OBSERVATIONS / NOTES:

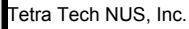
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Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s): _____



Project No.: _____

Personnel: _____

Measuring Device: _____

Remarks: _____

[illegible]

* All measurements to the nearest 0.01 foot

Standard Operating Procedure for Investigative Derived Waste

1. At Naval Station Mayport (NAVSTA), Investigative Derived Waste is defined as soil or water that is generated from the remedial investigation of contaminated sites. IDW can include, but not be limited to, drill cuttings, purge water, soil, sediment or decontamination water. Operations usually associated with IDW include soil and groundwater sampling, monitoring well installation and decontamination of equipment used for sampling and installation.
2. IDW will be containerized when generated and kept at the site of generation as coordinated with the tenant occupying the area. Drums can be moved to other locations in the general area to accommodate NAVSTA personnel movement or requirements within reason. A central location can be identified prior to the sampling event if in the best interest of the government.
3. IDW drums shall be clearly identified with "Awaiting Analytical" sticker visible containing contractor name and phone number, generation location, date of generation, NAVSTA point of contact, and contents of drum. A drum log using the format of Enclosure (1) shall be completed for each drum and provided to the NAVSTA point of contact when drum is generated. Drums shall be inspected weekly until disposal using Enclosure (2) and inspection form shall be faxed to NAVSTA Environmental Department. When sample results have been received, the analytical shall be provided to the NAVSTA point of contact for waste and disposal determination. The contractor shall be responsible for disposal of all IDW. IDW with analytical results less than Cleanup Target Levels identified in 62-777 Florida Administrative Code may be disposed onsite if sufficient soil is at location. IDW may not be disposed in storm drain or on an impervious surface. In certain conditions, non-hazardous IDW may be disposed through a sewer lift station to the Wastewater Treatment Plant with prior written approval by the Utility Engineer at Public Works Center Jacksonville.
4. If the IDW is identified as hazardous waste, the contractor shall manage drums per the NAVSTA Hazardous Waste Management Plan (SOPA(ADMIN) MYPTINST 5090.1F) and shall be disposed through the NAVSTA Hazardous Waste Storage Facility with the contractor paying disposal cost to PWC (2005 cost approximately \$1.75/pound). IDW that is not hazardous waste but does not meet the Target Levels to be disposed onsite, the contractor shall arrange for the IDW to be legally transported and disposed at an approved facility. The contractor will coordinate with NAVSTA personnel to sign the non-hazardous manifest as generator.

Naval Station Mayport Investigative Derived Waste Drum Log

Contractor Company Name: _____

Individual Name: _____

Location Name: _____
(i.e. SWMU number, Bldg number)

Date of generation: _____

Expected date of results: _____

Drum Number: __various (See Table Below for additional info.) _____
(Use site # and unique drum number)

| <u>Drum No.</u> | <u>Type of Waste</u> (i.e. drill cuttings, purge water) | <u>Quantity of Waste</u> (gals/lbs) | <u>Date</u> | <u>Individual's Initials/ Name</u> |
|-----------------|---|--|-------------|--|
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Enclosure (1)

WEEKLY INVESTIGATIVE DERIVED WASTE INSPECTION CHECKLIST

NAVAL STATION MAYPORT

This form is to be completed legibly by the contractor when conducting weekly inspections of IDW drums.

All discrepancies shall be corrected immediately. Failure to correct discrepancy(s) shall result in contractual action.

Date: _____

Inspector: _____

Company Name: _____

| | | YES | NO |
|--|---|-----|----|
| 1. | Are all containers properly labeled/dated? | | |
| 2. | Are containers compatible with contents? | | |
| 3. | Are all containers in good condition? | | |
| 4. | Are containers closed? | | |
| 5. | Are lids/caps/bolts/rings tight? | | |
| 6. | Are any containers dated longer than 60 days? | | |
| 7. | Number of containers inspected. _____ | | |
| Comments: | | | |
| Date/nature of repairs or remedial actions: | | | |
| Copy to: NAVSTA Mayport N4E FAX: 270-7398 (EACH FRIDAY) | | | |

Enclosure (2)